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RURAL AND DOMESTIC ECONOMY, &c.

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THE FARMER & GARDENER.

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Vol. II

THIS publication is the successor of the late
AMERICAN FARMER.

and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, MAY 5, 1835.

The undersigned proprietors of the *Maryland Agricultural Repository*, in tendering their grateful acknowledgements to the public for the liberal support and patronage, hitherto afforded them, in their agricultural implement manufactory, seed store, and nursery, deem it proper to state a change which they have thought it necessary to make in the arrangement of their concern. Believing that a Journal immediately connected with the establishment might be an auxiliary, both useful and interesting to the agricultural community, they have purchased the *Farmer and Gardener Establishment*.

The paper will be edited by Mr. E. P. Roberts, whose general knowledge of subjects connected with the pursuits of husbandry, and other qualifications for conducting such a work, give full confidence that the character of the paper will be sustained.

All communications relative to the paper or the business appertaining to the office, to be addressed to him.

The farming concerns, raising of stock, cattle and other domestic animals, and of the nursery of Fruit and Ornamental Trees, plants, &c., will be conducted by Robt. Sinclair, Senr.

The manufacture of all kinds of agricultural implements, the Iron Foundry and sale of Field seeds, will be under the control and management of James Moore.

The garden seed department, and town agency for the Claremont nurseries by Robt. Sinclair, Jr.

By this division of labour, which is intended to direct the attention of each to his particular department, it is believed an increased facility will be given for supplying articles from the different branches—nevertheless, all orders directed to either of them for articles from the respective branches, will receive prompt personal attention.

SINCLAIR & MOORE,
ROBT. SINCLAIR JR.

In assuming the management of the editorial department of this paper, we are fully aware of the heavy weight of responsibility which is necessarily devolved upon us, and are, therefore, duly impressed with a becoming sense of distrust, in our ability to meet the demands of the situation upon our exertions. But whilst we are thus distrustful of our own intellectual powers and acquirements, we are cheered onward in the undertaking, by that indulgent spirit which the American public has ever manifested towards those who aspire to be useful. If we were not conscious that our pathway will be strewn with difficulties, we would not, even then, be prodigal of promises; for we are at all times, and under all circumstances averse from indulging in professions, preferring that our labors should be permitted to be the test of our deservings, rather than place our sincerity in jeopardy by awakening expectations, which untoward events might prevent us from realizing, or by making pledges, which we might, possibly, be prevented from redeeming. This, however, we may be allowed to say—that as interest, a laudable ambition, and duty, all conspire to urge us to that end, so it shall be our highest source of pleasure, to make the columns of the *Farmer and Gardener*, at once interesting, instructive, and amusing. Although we are not a practical farmer, yet many of the happiest moments of our life have been spent in a course of reading connected with the pursuits of one; and if we have not read without profit, we trust that we shall be able to benefit the agricultural interest: if so, we shall consider ourselves as most fortunate, indeed, and be tempted to believe, that we have not lived in vain. Whilst we thus ingenuously avow our deficiency in practical knowledge, it is gratifying to us to be able to state, that we fondly expect to derive much solid instruction and useful information, from the senior proprietor of this establishment, who is now, and has been for many years, actively and intelligently engaged in the business of farming, connected with an extensive nursery. To be convinced that he is a good and cleanly farmer, it is only necessary to see his well tilled fields, and to observe the evidences of care-taking and economy, which, in every direction, present themselves to the eye. And we are not without hope, that we shall find much, in our intercourse with the other proprie-

tors, calculated to be of advantage to the agricultural community. As the manufacturers of Agricultural tools and implements, they have all been long and advantageously known; and their business, may be said to be closely allied with, and essential to, the successful prosecution of planting and farming; indeed, so much so as to form almost a branch of it: for without the facilities afforded by the results of the labor of those engaged in the fabrication of such instruments as are necessary to cultivation, what would be the condition of agriculture?—how meagre the benefits accruing to man from the fruits of the earth?—how different the comforts and conveniences of life?

Without violating our own sense of propriety, then, we may be indulged in making this promise,—that we shall be unceasing in our efforts to draw from every available source, whether to be found in books, in agricultural periodicals, or in the communications of correspondents,—such information as in our judgment, may be best calculated to advance the prosperity, and promote the happiness of those engaged in the walks of husbandry; for, after all, without in the least desiring to detract from the merits of other classes, they are the most important, and conduce more, by their peculiar labors, to the true enjoyment and well-being of mankind, than, perhaps, all the rest beside.

As the title of our paper imports, its chief object is the dissemination of information upon the business of agriculture and gardening—and to that, we shall mainly confine ourselves—but as we are strongly impressed with the belief that we can increase the interest of our columns, by devoting a small portion of them to matters of a miscellaneous character, we shall each week give a brief abstract of all foreign news, and a summary of such domestic events as may occur, so that the readers of the *Farmer and Gardener* may be kept advised of what is going on abroad and at home: not forgetting to furnish something to please the female taste, and assist the good housewife in the management of her internal arrangements.

We shall pay particular care to obtain the prices of all staple articles, and to have our price current regularly corrected, so that it may be, as far as it goes, what it ought to be, a faithful index of the markets: nor will we be indifferent to the state of those abroad for all such articles as are of American growth, or which come into competition with the staple productions of our country.

We shall occasionally *embellish our pages with drawings*, calculated to be of advantage to the agriculturist,—such as farm-houses, barns, stables, and other outhouses, and implements of husbandry, and especially such of the latter as may be of new invention and real utility. To effect this, will require considerable expenditure, but this we will freely incur, as we desire by our exertions to please, to render our work acceptable to its patrons. And in order that the sphere of its usefulness may be extended, we respectfully solicit of the farmer and planter, to favor us with their views on subjects connected with their respective avocations. There is no one engaged in either branch, who, if he be observant, but may communicate something of importance, and it is by such an interchange of thoughts, that each may impart or receive information of deep concern to all.

In conclusion, we would most respectfully bespeak for the *Farmer and Gardener* a kind and generous support; and in advance, make this additional promise—that we will endeavor, by assiduity and untiring industry—by an honestly directed exertion of our humble talents—and by an unflinching devotion to the interests of Agriculture, to evince the sincerity of our intentions, and the gratefulness of the emotions with which we are inspired.

We are requested by Mr. Hitchcock, the late proprietor and editor of this paper, to express his regret at being prevented by want of room from noticing the very interesting letter, which appeared in the last number, from the pen of his accomplished correspondent, N. D. Smith, Esq. of Hempstead Court House, Arkansas territory. We comply with this request with the more pleasure, as it enables us to say, on our own account, that we should be highly gratified at receiving similar favors from the same intelligent and instructive source.

POTATO CULTURE—We give place to-day to a most valuable essay on the cultivation of Potatoes, by Mr. A. W. Barnum, of Vergennes, Vermont, for which we bespeak an attentive perusal from every reader. There is, perhaps, no crop, so irregular in the amount of its yield; none, when properly managed, which, in good seasons, is more generous in its rewards to the cultivator; and certain we are, that in the whole family of root vegetables, there is not any which can compare with it in the degree of benefit which it has conferred on mankind. Such being the case, any plan of culture calculated to ensure large and uniform crops, should be hailed as a desideratum greatly to be desired. Mr. Barnum, in his paper, has treated the subject most thoroughly—from the soil to its preparation for,

and planting, the mode of culture, the kind and method of applying manures; in short, every thing connected with the subject from the breaking up of the ground to the housing of the potatoes, is treated in a clear and comprehensive manner, and sufficiently concise to be of general utility. The plan of dividing his method of cultivation under appropriate heads, is peculiarly happy, and will afford great facilities in after reference, as any particular branch may be recurred to without the least difficulty.

It will be seen that, although 200 bushels to the acre exceeds the average yield, and is considered a fortunate crop, Mr. Barnum advances the opinion, that, by pursuing his course, in ordinary seasons, on a good soil, a crop of from 800 to 1200 bushels to the acre, may be rationally calculated upon. If such results be practicable, or even the moiety of them, may we not ask, is not every planter and farmer invoked alike by duty and interest, by the comfort of those dependent on him, and by a proper regard for the condition of his milch cows and other cattle and stock through the winter, to make a fair and full experiment? Of one thing he may be morally certain, that if he should be disappointed in the quantity of his potatoes, he will be gratified in witnessing the most beneficial effects upon subsequent crops, so that should he fail in being compensated in the first instance, he will be more than remunerated in the after fruitfulness of his soil.

After a careful reading of the process laid down by Mr. Barnum, we must in perfect candor say, that it comes most strongly recommended to us by the impress of common sense and of nature; qualities of no mean import, in our humble estimation. His manner of applying his manures, of top-dressing, his method of preparing the ground, of laying off the rows, so as to give free scope to the light and air, his plan of hoeing or hilling, which consists in bringing fresh earth from ditches sufficient to raise a hill of about two inches around the plant, (which by the way, is novel in this quarter,) so as not to disturb the young and tender roots, while growing, by scraping the earth from between the drills, together with the suggestions which he throws out upon the subject of topping, and the proper time for gathering the roots, are judicious and worthy of all consideration. But we will not forestall the reader; and, therefore, refer him to the article, which will be found to be, in itself, a complete manual of potato-culture.

THE TURF REGISTER—The May number of this excellent and spirited journal, is just received, and as usual, is replete with interesting and stir-

ring matter. We have long thought it should be taken by every agriculturist of taste, and that no one, who has a soul to enjoy the animating subjects, of which it treats with so much raciness, talent, and research, should be without it, whether he be an admirer of those noble animals, whose generous performances it describes so ably, and with such graphic effect, or whether he desires merely to encourage a work of decided merit. The present number is embellished with a cut representing the death of a fox, the ears of the dogs being rounded off according to the English fashion, a sight, by the bye, which is calculated to make the blood course most rapidly through the veins of a man whose heart is in the right place.

DOOR GRASS.—In the Asiatic Researches there is a paper furnished by Capt. David Richardson, in which he describes a species of grass indigenous to the East Indies, under the above name, which, if all that is said of it be true, would prove a great acquisition to our agriculturists, could it be acclimated with us; and from the success which has already attended the introduction of many of the productions of India into our quarter of the globe, we should incline to the opinion, that but little doubt can exist of the practicability of our being able to cultivate it to advantage. That it would suit the temperature of the more southern states, we presume there can be no question. At all events, it is worthy of an experiment; and we think that those of our masters of merchant ships who may be trading to the East Indies, could not do their countrymen a more acceptable service than by procuring some of this grass to be added to the various kinds already cultivated in America. From the ease with which it vegetates there would be no difficulty in transporting it hither, the roots or parts of the blades being planted in a box of mould, if the seed could not be obtained. Captain Richardson thus describes it:

"This is probably one of the most common, useful and beautiful grasses in this or any other country, and like the cow which feeds upon it, is held in religious veneration by many tribes of hindoos. A natural velvet carpet, if the expression be admissible, may here, at any time, be formed, of this elegant grass, in the space of two or three weeks, merely by chopping it into pieces and sprinkling these on prepared ground mixed with earth. In this way the banks of rivers, public roads, fortifications, ditches, garden walks and marginal borders, are frequently prepared in India, upon principles which unite expedition, strength and elegance, in one verdant sward, which to people unacquainted with the rapidity of vegetation in those climes, has almost the appearance of enchantment. The roots are esteemed medicinal by the natives, and there can be little doubt of the nutritive quality of the whole plant, considered as the food of animals."

THE TEA SHRUB.—We learn from the Pittsburgh Advocate, that the Rev. *Calvin Wait*, has addressed the Horticultural Society of Pittsburgh, a communication in reference to a shrub, which grows extensively in Limestone township of Alleghany county, Pa., and which is supposed to be the real Tea Shrub.—The principal reason assigned for this belief is the resemblance which Tea made from it bears to the imported; Mr. Wait says:

"I shall be highly gratified if the Society take an interest in examining this supposed Tea Shrub. The belief that it is the real article is the resemblance which tea made from it bears to imported Teas, as we have not the means of comparing the shrubs. It is found most commonly on high land, growing in a light sandy soil. The height does not generally exceed three feet. The leaves are green, not far from an inch in length. The flowers are white. The seeds resemble those which are sometimes found in imported Tea. The kind or flavor of Tea very much depends upon the season and manner of curing it. It may be cured in the month of June, before the leaves are grown, and in July when it is in blossom (which, perhaps, is the best time,) and later in the season till frost comes. I have ascertained by trial, that different shades of color can be produced in curing."

It is to be hoped, that the Agricultural Society of Pittsburgh, will avail themselves of Mr. Wait's suggestion, and cause the proper examination to be made, to ascertain the real character of the shrub in question. Whether on examination it may be referred to the genus of that, of which the tea of our tables is made, is not so material; for if it be equally pleasant in its flavor, exhilarating in its effects, and agreeable to the palate,

"That which we call a rose, by any other name would smell as sweet,"—

and the discovery,—if it should be one,—will be of lasting benefit to the country, as it will tend to keep millions of the precious metals at home, to answer the purposes of domestic exchange, which now go abroad, to return no more. The description given by Mr. Wait, is not, however, sufficiently full, to enable the reader to determine, whether his belief in its identity with the tea shrub of India, be well grounded or not. Its height does not correspond, but that may be the result of cultivation, and the superior fertility of the soil of India; where from the density of the population, every foot of ground is of value to human existence, and consequently pushed to the utmost limits of improvement. The tea plant of India, so strongly resembles the *Camellia* in its botanical character, that it has lately been classed with that genus. It is described in an article in the Encyclopædia Americana, to have much smaller flowers and leaves than that plant, which accords

with the description of Mr. Wait, of those of the shrub of which he has written. The East India tea plant, attains the height of five or six feet, and is branching and evergreen; whether the shrub of Alleghany county, Pa., possesses the latter characteristic, is not mentioned by Mr. Wait; and we, therefore, conclude that it is not an evergreen, or he would have said so. The leaves of the plant of India are alternate, oval-oblong, serrated, about an inch and a half in length, of a dark glossy-green color, and firm texture. The flowers are solitary, or in pairs, disposed in the axils of the leaves; the corolla white, and composed of six petals. It is a native of China and Japan, and has been cultivated, and in common use in those countries, from the most remote antiquity.

Tea, says the same excellent work, was hardly known in Europe, before the middle of the seventeenth century; but now has become an article of such commercial importance in that portion of the globe, as to employ more than fifty thousand tons of shipping in the transportation of it from Canton. Still so vast is the home consumption, that it is alledged, that if Europeans were to abandon the commerce altogether, the price would not be much diminished in China. It is cultivated in all parts of China, even in the vicinity of Peking, which is in the same latitude of Philadelphia, and has a very similar climate. It succeeds best in south exposures, and in the neighborhood of running water. As the seeds are very apt to spoil, and scarcely one in five will germinate, it is usual to plant several in the hole, at the depth of four or five inches. The plants require little further care, than that of removing the weeds, till the third year, when the leaves may be gathered. In seven years, the plants have attained the height of six feet; but as they bear but few leaves, they are trimmed down, which produce a great number of new leaves. The leaves are plucked off one by one, with many precautions, and only from four to fifteen pounds are collected in a day, by each gatherer. In a district of Japan, where the tea plant is cultivated with peculiar care, the first gathering takes place at the end of the winter, when the leaves are young and tender, and are only a few days old; these, on account of their scarcity and dearness, are reserved for the wealthy, and called *imperial tea*. The second gathering is at the beginning of spring, when some leaves have attained their full size, and others are only expanding; all are gathered promiscuously, and afterwards sorted: the youngest especially are separated with great care, and afterwards sold for the imperial. The third and last gathering takes place towards the middle of summer: the leaves are

now fully expanded, of inferior quality, and are reserved for the common people. There are two varieties of the tea plant—*T. viridis*, with broad leaves, and *T. bohea*, which latter, is, by some writers considered a distinct species. Formerly it was thought, that green tea was gathered exclusively from *T. viridis*; but this is now doubtful, though it is certain, there is what is called the *green tea district*, and the *black tea district*; and the varieties of the one differ from those of the other district. The received opinion now, is, that either of the two plants will afford the black teas of the shops; but that the *T. viridis* is preferred for making green tea.

We received the early part of last week, from Mr. *P. R. J. Frieze*, of this city, a present of a cucumber, measuring seven inches in length and the same round the girth, raised in his hot house. Such attention to the maturing of early vegetables, by private gentlemen, is worthy of all praise, and evinces a spirit of generous emulation which must advance and dignify the art of horticulture.

RIBBON GRASS.—We have read with much interest two numbers, of a series of essays, now in a course of publication, in the New Hampshire Journal, on the subject of grasses. They are by an old experienced farmer, Mr. *Abednego Robinson*, of Portsmouth, and are written with all that strong good sense, and shrewdness of observation, for which the intelligent farmers of that section of our country are so remarkable. In the third number, he treats of a species of grass, which he terms *Ribbon Grass*, and which is also known by the names of *Fancy*, and *Puzzle grass*. It grows to the height of 4 feet, is represented as being preferred by stock even to timothy, and will yield from three to four tons to the acre. It will bear being cut twice in the season, and has this advantage over most other grasses, that it vegetates luxuriantly in bogs, marshes and quagmires, or to use the language of Mr. Robinson, "it is truly amphibious, and will do well on *high dry lands*, and thrive in a *bog*, or even *in water*." It may be planted in a marsh without draining, as from the tough nature and prolific growth of its roots, a sward is soon produced that will bear cart and oxen to pass over it. It is not thought to mature seed that will germinate, but can be very successfully propagated from the roots by dividing the tufts so as to have from three to four stalks in each, setting them out about two feet apart; and from an experiment which Mr. Robinson made, he thinks the stalks of the grass will vegetate without roots, and should he be correct in this supposition, the facility of setting out a field, marsh,

or spot of wet or boggy ground, would be greatly increased. The stalks without root, we should presume, would thrive best, however, in moist situations; but at all events, if it be considered, that this grass, when once set, will last for years, and drive out every other species, the extra labor in propagating it at the onset, is, in fact, not a very serious objection, and should deter no one from entering into its culture.

STUMP LIFTER.—Capt. L. Norcross, of Dixfield, Maine, has invented a new machine for lifting out or removing stumps. It consists of a large screw placed in a nut, which is attached to legs like those of a surveyor's compass.—These, being sufficiently strong, are placed above the stump, and it is then grappled to the screw by chains or hooks. A large sweep, like that used in some old fashioned cider mills, having a nut to fit, is put upon the screw, and horses or oxen hitched on the other end, by means of which, the stump is raised from the ground by driving round the sweep.

EFFECTS OF HIGH CULTIVATION.—A Mr. Chase, in an article in the Portland Courier, states that he raised in his garden during the past season, from four grains of wheat, eighty heads, one of which measured six and a half inches in length, and contained eighty grains. From the eighty heads he obtained 4,589 grains of wheat, measuring nearly half a pint, making the rate of increase 1,134 fold.

MARYLAND HORTICULTURAL SOCIETY.

Saturday, April 25, 1835.

The following articles were exhibited:

By Thomas Kehoe, gardener to Col. B. C. Howard, a very fine specimen of Cauliflower, early frame Cucumber, new Potatoes, and Rhubarb, the latter from the open ground.

By Mr. Duncan, two very fine heads of Lettuce.

By Mr. Stonecker, gardener to J. B. Morris, Esq. a very fine Cauliflower.

By Mrs. Geo. H. Keel, 7 varieties of Hyacinths, 2 varieties of Polyanthus Narcissus, &c.

By Mrs. B. I. Cohen, 13 varieties of superior Hyacinths; and a splendid specimen of Rosa Banksia lutea.

By Miss E. Franciscus, a fine plant of S. American Amarillis.

By John Feast, Azalea Linensis, yellow Chinese Azalea, (this is the first time this plant has flowered in Baltimore.) It is a very fine variety, and Heliotropium Corymbosum, &c.

At 12 o'clock the committee met and awarded the premium to Tho. Kehoe, gardener to Col. B. C. Howard, for his Cauliflower, Cucumbers, Potatoes and Rhubarb.

GIDEON B. SMITH,
Correspondent Secretary.

Man is blind to his own faults, but clear sighted in discerning those of others.—*Phæd.* He quickly sees the "mote in his brother's eye."

THE FARMER.

POTATOES.

Essay of Mr. A. H. BARNUM, on the culture of Potatoes containing concise, though perspicuous directions, for preparing the ground for planting, the manner of dressing, hoeing or hilling, the location, as well as the soil best adapted to their growth, the season for planting, time for gathering, and the manner of housing and preserving them: each part arranged under an appropriate head.

[From the Vergennes Gazette.]

MR. BLAISDELL—In your paper of the 21st December last, I published the result of some experiments made during the season, in growing POTATOES. The quantity produced was such as to cause considerable excitement with agriculturists, and I have been called on by public Journals and private letters, from Maine to Georgia and from Quebec to Malden, for information respecting my manner of cultivating them. The respectability of the sources from which these inquiries emanate, and the very polite and flattering terms in which they are expressed, forbid the idea of refusal. I therefore embrace the first opportunity my health admits, of attempting to gratify their wishes, to the extent of my limited powers.

From the remarks of some of my correspondents I am inclined to believe they misconstrued the statement made in the publication above alluded to. By reference to the statement it will be found that I did not say, or expect to be understood by Field culture, that 1,800 bushels of Potatoes could be raised upon an acre. I then said as I now say and believe, that 1,000 bushels can be grown upon a single acre at less than half the expense and labor they are produced from four in the common manner of culture.

PREPARATION FOR PLANTING.

Whatever soil may be selected for this purpose, to insure a large crop, it should be highly manured with compost decomposed vegetables, or barnyard manure, the latter I consider preferable when it can be obtained with convenience, if raw or coarse be made use of, it should be spread immediately before the first ploughing, on the same day, to prevent the evaporation of its best qualities, which will rapidly depart if left exposed to the sun and atmosphere.

The first should be deep ploughed, and may be done as early as suits the convenience of the cultivator. If a stiff marl or clay soil, it would be well to have it ploughed late in the fall previous to planting: where compost or other substances not liable to fermentation are intended as a manure, it is better the spreading should be omitted until just before the last ploughing, after which it should be thoroughly harrowed fine and smooth as possible, then take a narrow light cultivator, or small plough, calculated for turning a deep narrow furrow, with this instrument lay your land in drills, twenty inches asunder and four inches in depth, running north and south if practicable, to admit the rays of the sun to strike the plant equally on both sides; put into the bottom of the furrows or drills about two inches of well rotted barn yard manure or its equivalent, then drop

your potatoes, if of the common size, or what is more important, that they contain about the usual quantity of eyes, if more, they should be cut to prevent too many stalks shooting up together; put a single potato in the drills or trenches 10 inches apart, the first should remain uncovered until the second one is deposited, to place them diagonally in the drills, which will afford more space between the potatoes one way, than if laid at right angles, in the rows. The covering may be performed with a hoe, first hauling in the furrow raised on each side the drill, then carefully take from the centre of the space the soil to finish the covering to the depth of 3 1-2 or 4 inches, by taking the earth from the centre of the space on either side to the width of 3 inches, it will leave a drain of 6 inches in the centre of the space, and a hill of 14 inches in width gently descending from the drill to the drain, the width and depth of the drill will be sufficient to protect the plant against any injurious effects of a scorching sun or drenching rain. The drains in the centre will at all times be found sufficient to admit the surplus water to pass off. I am not at all tenacious about the instrument to made use of for opening the trenches to receive the manure and potatoes, this work should be well done, and may be performed with a common hoe, with much uniformity and accuracy, by stretching a line to direct the operation; it is true that the labor cannot be performed with the same facility as with a horse, but it can be better done, and I think at less expense, taking into consideration the labor of the man to hold, the boy to ride and the horse to draw the machine.

DRESSING, HOEING, &c.

When the plant makes its appearance above the surface, the following mixture may be used, for each acre take one bushel of plaster and two bushels good ashes and sow it broad cast as even as possible, a moist day is preferable for this operation, for want of it, a still evening will do.

I consider this mixture decidedly more beneficial and much safer than plaster or ashes alone. The alkali and nitre contained in the ashes loses none of its fertilizing qualities in a moist season, and the invaluable properties of the plaster are fully developed in a dry one, by decomposing the atmosphere and retaining to a much later period in the morning the moisture of the evening dews. There are but few plants in our country that receives so great a share of their nourishment from the atmosphere as the potato. The time for dressing or hoeing will be found difficult to describe and must be left to the judgment of the cultivator, it should however, in all climates be done as early as the first buds for blossoms make their appearance.

The operation of hilling should be performed once and *once only* during the season, if repeated after the potato is formed it will cause young shoots to spring up, which retards the growth of the potato and diminishes its size. If weeds spring up at any time, they should be kept down by the hand or hoe, which can be done without disturbing the growing stalk.

My manner of hoeing or hilling, is not to haul in the earth from the space between the hills or rows, but to bring on fresh earth sufficient to raise the hill around the plant 1 1-2 or 2 inches in a wet season, the lesser quantity will be sufficient,

in a dry one the larger will not be found too much. The substance for this purpose may consist of the scrapings of ditches or filthy streets, the earth from a barn-yard that requires levelling; where convenient it may be taken from swamps, marshes, the beds and banks of rivers or small sluggish streams at low water. If planted on a clay soil, fresh loam taken at any depth from the surface even if it partakes largely of fine sand will be found an excellent top dressing. If planted on a loamy soil, the earth taken from clay-pits, clay or slaty soil will answer a valuable purpose; in fact, there are but few farms in the country but what may be furnished with some suitable substance for top dressing if sought for. The hoeing and hilling may be performed with facility by the aid of a horse and cart, the horse travelling in the centre of a space between the drills, the cart-wheels occupying the two adjoining ones, thereby avoiding any disturbance or injury to the growing plants. The time for collecting the top dressing may be regulated by the farmers own convenience, the earlier the better, deposited in large piles in or near the potato field, in the most suitable place for distribution.

I have frequently tried bed-planting, (or planting in beds) with uniform success. On moist lands in a stiff or heavy soil, I consider it preferable to any other mode; to do it properly lay your land in beds of from 10 to 20 feet in width, raised in the centre with a plough by back furrowing, after the last harrowing, which should be thoroughly done, is performed and left *crowning* with a gradual descent from the centre to the alleys, the proper width and height of the beds must depend on the situation of the land, and may be regulated by the judgment of the cultivator. In clearing the alleys, which need not exceed 16 or 18 inches in width, the laborer should stretch two lines the proper distance on each side the alley and throw upon the beds with a shovel the earth necessary to be removed.

The use of lines may be by some considered a useless expenditure of labor,—not so,—the regularity and neatness of appearance will be an abundant remuneration for the trifling time occupied in stretching the lines.

After the land is prepared for planting, strike it out in drills or trenches as before directed, 12 inches asunder, in these drills, drop the potatoes 12 inches apart (diagonally,) to be covered, hoed, dressed and managed in the same manner as in Field culture, with the exception of making a drain in the spaces between the drills, which is unnecessary and should be avoided. In filling the trenches, dressing, &c. the horse-cart must be dispensed with and a hand-cart or wheel-barrow substituted.

In recommending the drills north and south in field planting, I did not wish to be understood that other more valuable considerations should be abandoned for this practice, it is desirable it should be so, where the level or moderate descent of the land will admit of it, but if too steep and liable to wash, care should be taken to avoid this evil by running the drills in such direction as may be required to maintain a proper descent, even if it should be necessary to run them in curved lines, or wind around a steep hill to preserve the required descent to admit the surplus water to pass off.

In communicating my experiments to some of

my neighboring farmers, who are always in a hurry and run over with the plough two acres of land in half the time required to do justice to one; their reply generally is, that my tedious mode of cultivation has too much *piddling* and small labor for their patience, and persist in their accustomed manner of half ploughing, half planting and half hoeing five acres of good land and not obtain more potatoes than one, properly cultivated would produce, thereby losing half their labor and seed, besides the use of four acres, of their best land, which might be converted to other valuable purposes.

I should think that intelligent farmers by a little reflection would perceive the folly of pursuing the usual wasteful practice of planting potatoes in rows in hills four feet asunder, leaving four fifths of their land unimproved and subject to a rapid waste of its most fertilizing qualities by being nakedly exposed to the washing of drench-rains and the evaporation of the atmosphere; and after all their labor may consider themselves fortunate if they obtain 200 bushels to the acre, which exceeds the average yield in this section of country. By pursuing the course I have recommended, in ordinary seasons on a good soil you may rationally calculate on a crop of from 800 to 1200 bushels to the acre.

To such farmers as complain of my tedious and piddling mode of culture. I have only to remark, if they will piddle their land in the same manner, even if they waste half their crop, they will find themselves richly rewarded for their whole labor, in the benefits they derive by this preparation in succeeding crops. I would also add, that I believe it is generally acknowledged, that rotation in most kinds of crops is desirable, but in none more necessary than in potatoes, even a second crop on the same ground well prepared will be found to degenerate in quality and quantity.

LOCATION.

The district of country in North America best adapted to their growth, taking into consideration quantity and quality, is situated between the 2d and 10th degrees of east longitude (from Washington) and between the 42d and 50th degrees of north latitude, they are grown to a very considerable extent much farther north, south and west, but in diminished quantities and inferior qualities.

SOIL.

A rich Marl or Clay is perhaps the most productive; a strong moist loamy soil (the newer or less it has been cultivated the better) is the most convenient and least expensive soil to grow them on, most soils common to our country will produce them in great abundance and perfection, the more rapid the growth the better the quality.

SEASON FOR PLANTING.

In this respect they are a most accommodating crop, allowing the farmer in the southern and central part of the designated district 20 or 30 days to perform the operation, the particular time depends in a very considerable degree upon the climate; in the region of my residence (the 44th degree of north latitude) they may be planted from the 10th of May to the 16th of June. At the extreme north of the described limits less latitude is afforded for seed time and harvest. The good husbandman in that climate should make all practicable preparation for his crop in the fall, and

plant as early in the spring as the ground is sufficiently dry and warm: here the growth is extremely rapid, not requiring more than from 90 to 110 days to perfect it, the quantity will not be quite so great as with us, but superior in quality.

KIND OF SEED TO BE PLANTED.

This is a question of too much difficulty for me to answer satisfactorily to myself, or instructive to the numerous inquiries of my correspondents; the kind and qualities in a single neighborhood are too numerous and their names too local and variable to admit of an intelligent reply.

The female of this plant (like most of her sex) is so jealous of her rights and privileges and so tenacious of cultivating a friendly intercourse, and connection with her neighbors, that the blossoms in fields at 200 yards distance, planted of different kinds of seed, are frequently found contributing liberally with each other (by the aid of a gentle breeze) a portion of their generating *Farina*, which is generously received and kindly nourished; the product of this connection strongly partaking of the properties and appearance of both, many of them in apparent equal parts; plant this mixture a few years, in a place of safety, and it will be found that the weaker plant will gradually yield to the stronger, until the one most productive and best suited to the climate will be produced in its original and unadulterated purity.—The fact goes far in satisfying me of the cause of our frequent disappointment in not finding seed at all times producing its kind. We have abundant means with a little care and patience, of supplying ourselves with every variety of potatoes, the growth of which is adapted to our climate.

The wise Provider of all good things, has kindly furnished us with the means of providing ourselves with innumerable kinds and qualities of this vegetable. The ripe balls or seeds from a single stalk, will produce by three seasons planting, almost countless varieties of every color, shape, size and quality, which the country has heretofore produced, and something new, in addition.

The first seasons planting they will be small and tender, the second larger, and the third of suitable size for field planting.

The only answer I can give to the inquiry for the right kind of seed, is to recommend to the farmer that kind to be procured in the vicinity most productive, except a small quantity, if he possesses them, of a superior quality, for table use. In changing seed, which will occasionally be found beneficial, if removed from any considerable distance, should be taken from the north, the growth will be more rapid, consequently, the quality better, and in southern climates the quantity greater for the first season, at least.

TIME FOR GATHERING.

This ought to be done when the potato is ripe, and *not before*, the idea so generally entertained that an early frost which nips the top and destroys the vine, prevents the further growth of the potato is a mistaken one and ought to be exploded: on the contrary, if it has not at this time attained its full size and weight, it grows more rapidly, the nourishment required for sustaining the top is transferred to the root. From a knowledge of this fact, satisfactorily tested, I am inclined to believe that by clipping the bushy part of the top with a scythe or other instrument, after the ball has attained its full size, the crop would be great-

ly benefitted by the operation. I have made a few experiments of this kind, all tending to confirm my belief, but not sufficient to warrant me in making the broad unqualified assertion of the positive correctness of my opinion. I hope agriculturists in different sections of the country will lend a helping hand to aid in testing the correctness or incorrectness of my doctrine in this particular. The green tops are excellent food for cattle or swine; if left on the field will produce no injury, but serve to enrich the soil.

HOUSING AND WINTERING.

The erroneous practice pursued by our best farmers generally, induces me to state the manner I have pursued for years with unvaried success. To preserve 5 or 600 bushels, I make a box or bin 4 feet wide 3 feet high and sufficient length to contain the required quantity, have the joints well fastened and made as tight as possible, put it into the cellar on skids, raising it 3 or 4 inches from the cellar bottom; if the potatoes are intended to be taken out at different times, two or three partitions should be put in cross wise of the bin, to prevent such as are not required for immediate use from exposure to atmosphere. After this preparation is completed, the next operation is gathering and housing them. Here I must again dissent from the usual practice of farmers generally, instead of leaving them in the sun and wind to dry, after digging, in small parcels, in carts or heaps, they should be immediately covered with the tops or something else, even if they remain in the field but a few hours, this destructive practice, I think must be entirely attributable to want of reflection, it is the sole cause which produces the evil so much complained of, [by us called] the watery potato, by the Irish, the winded potato, destroying not only the flavor, but a great portion of its nutriment. In fact, sun, wind and rain, are as destructive to a new dug potato, as moonlight is to a fresh caught fish. When your potatoes are removed to the cellar, put into the bottom of the bin 2 inches of fresh earth, then fill one apartment with potatoes, within 3 or 4 inches of the top, immediately cover it with tough grass turf, cut up with the spade a little dove-tailing, to the thickness of 3 or 4 inches, cover them with the turf, grass side up, packed close and pounded down with a wooden mallet, to exclude as much air as possible. In this manner in a cellar of suitable temperature, they may be kept fresh and good for a year, without germinating. No danger is to be apprehended of having too much dirt stick to the potatoes, it assists in preserving them; an occasional sprinkling of fresh earth amongst them will be found serviceable.

POTATOES FOR FOOD.

Their uses for man or beast are too well understood to require any remarks of mine, on the subject. This most valuable of plants in the whole vegetable kingdom, undoubtedly affords more healthy nourishment to that portion of the human family residing in Europe and America, than that of any other vegetable, perhaps it is safe to say, double the amount, and at less than half the expense.

POTATOES FOR BREAD.

By adding to wheat or rye flour, one fourth or one third part of the meal of potatoes, the quality of the bread will be improved as a healthy food and the flavor equally palatable. It is easy of di-

gestion, sets kindly on the most delicate stomach, is highly beneficial in dyspeptick complaints, a disease (by the bye) more common than necessary in our country; and generally originates from idleness; in some cases, too close application to study—but more generally by high living, want of proper exercise of body and mind, or too great indulgence in hypocondriacal reflections.* I am no Doctor, but will guarantee a cure gratis, to such as have mind, nerve and resolution enough to follow my prescription.

The disease is of rare occurrence amongst the laboring class in Ireland, that live on potatoes and salt six days in a week, and is equally so amongst the peasantry of Canada.

The manner of making this bread is simple and easy; boil good potatoes properly, drain off the water as soon as they have boiled sufficiently, let them remain in the warm kettle to dry, take off the skin, put them in a mortar and pound the meal fine, to which add a little fine salt, previous to putting in the yeast to raise the bread, mix the potato meal thoroughly with the flour, afterwards pursue the usual process of making bread from flour. Its general use should be encouraged by the government and people. In addition to the benefits produced on the health of the consumer, in point of economy, it will be found an immense saving in the expense of bread stuff, a saving worthy of the consideration of the American people, a saving equal to the whole amount and cost of the bread consumed by 3,000,000 of her population, a saving in every five years, to each populous state sufficient to defray the expense of constructing a Rail Road in each, from one extremity to the other. Is it not then the duty of every well wisher to the prosperity and happiness of the human family, to encourage the culture and more general use of the potato, by precept and example; it is not only useful in bread, but in many cases an excellent substitute for it; with a beef stake in the morning, a fine baked potato will be found a comfortable substitute for a slice of bread.

To such as are fond of that most nutritious liquid which first gave to their infant bodies strength and vigor, a good boiled or baked potato may be satisfactorily substituted for a slice of bread in a bowl of milk.

In fact its uses may be increased ten fold without infringing on the rights and privileges of the most fastidious epicure, or the strong propensities of the fashionable gormandizer, who worships his BELLY at the expense of his TOES.

In conclusion, I have only to add, that I am fully aware my communication will be considered by many readers who take the trouble to wade through it, unnecessarily long and tedious; the only apology I have to urge, is a want of knowledge of proper language to express my ideas with brevity, a wish to answer the many minute inquiries of my numerous correspondents, and the strong desire I have to cause two potatoes to grow this season where one did last.

I hope the purity of my intentions will protect me against the malignant shafts of the merciless critic. He is at full liberty to attack the matter, but spare the manner. I beg of him not to for-

* Here our friend Barnum has mistaken effect for cause.

get to remember that many of us who hoe potatoes most of our days, and sleep most of our nights, have very little time to attend schools, to learn and expose our neighbours faults, or forget and hide our own.

Should the foregoing remarks (which are as applicable to many other crops as that of potatoes) have the effect to improve the culture of the earth beneficially, to any portion of my fellow-citizens, I shall consider myself, even this in my ill state of health, abundantly remunerated for my feeble attempts at improvement. A. W. BARNUM.

Vergennes, March 13, 1835.

BEETS.—Beets furnish from a given surface of ground a greater quantity of nutriment for horses and cattle than any other kind of forage. Wherever its cultivation is understood, it has the preference over all other roots. It succeeds in almost all soils, is but little affected by the vicissitudes of seasons, and prepares the ground very well for succeeding crops.

Throughout Belgium and Germany, the leaves are from time to time stripped off and given to the cattle, which eat them with avidity and easily fatten upon them. Fowls are also fed upon them. They are first hashed up, and then mixed with bran. Pigs eat them with a good relish. Milch cows, when fed upon them, fatten at the expense of their milk. The leaves are equally valuable in the fattening of cattle and sheep.

Beets should be gathered when the weather is dry, and put away in a dry state; and when prepared for cattle, they must be cut up fine with some suitable instrument, and may be given either alone or mixed with straw or hay.

They are equally fit for horses, with the precaution of adding a variety of cut straw and hay well mixed together. This food will preserve them strong and vigorous, as is well ascertained in Germany, where beets are much cultivated for this purpose.

For the fattening of a bullock, forty or fifty pounds of beets per day mixed with five or six pounds of dry fodder, will accomplish the objects in the space of four months. Care must be taken to give it in three separations, since by feeding often and in small quantities at a time, the same amount of nutriment goes farther.

Finally—by facilitating the means of stable fattening, throughout the year, beets furnish a very important addition to this means of augmenting the mass of valuable manure.

They may serve also, on occasion, for the food of men; they are less subject to the vicissitudes of seasons than turnips, and their leaves supply for several months an excellent food for cattle. The root may be easily preserved during eight months of the year. They give milk an excellent taste and quality. Cattle eat them with avidity, and are never tired of them. The culture of no forage root can compare with that of the beet in the number of advantages which the industrious cultivator may derive from them. We cannot too strongly recommend the introduction of them into places where they are not already in vogue.—[*Bib. Univ. for 1831.*]

A new species of potato has been introduced into the province of Ardeche, in France. One

small root of which of half an ounce in weight, produced it is stated, 48 pounds, and two bulbs, in as many years six cart loads.

FOREIGN ABSTRACT.

Mexico.—The packet ship Congress, arrived at New York, from Vera Cruz, brings intelligence that a new revolution had broken out in the south of Mexico, which threatened serious consequences to the present government. This movement appears to have been made in the first instance by General Alvarez, the governor of the state of Zacatecas, who came out with a proclamation that Santa Anna is incapable of acting as president, until he be fairly tried by a competent court, and establishes the justice of his conduct in disobeying the old congress. Three of the most important states had joined with Zacatecas in this declaration. General Santa Anna, on receiving the news left his farm, where he was at the promulgation of Gen. Alvarez' proclamation, for the city of Mexico, the seat of the United government. Private letters from Vera Cruz announced that a great excitement prevailed there among the adherents of Santa Anna, and that serious apprehensions were entertained, that another revolutionary movement in favor of a central government, would be made by the garrison of that city 2,000 strong.

In Brazil, a revolutionary movement has also been made, attended with the death of President Melchor and 80 others. Viagre Melchor's accomplice in the revolution of January last, is now at the head of affairs, but is not likely so to remain. The late revolution occurred on the 19th of February last.

DOMESTIC SUMMARY.

The Legislature of New York, have agreed to a proposition for amending the constitution of that State, in relation to their judicial system. The leading features of the plan are, that there shall be two common law tribunals; a supreme and superior court, and each to consist of five judges, who are to be incapable of holding any other office. The office of circuit judge is to be abolished.

There is a bill before the Legislature, reorganizing the Chancery Court, it not requiring an amendment of the constitution for that purpose.

A destructive fire occurred at Albany, New York, on the evening of Friday, the 24th ultimo.

A young gentleman of Cincinnati, Ohio, has nearly completed an *Air-Gun*, which he thinks will supercede all other guns; it is so constructed that by turning a crank, which can be done by a boy, it will discharge sixty balls per minute, and that with a force of 130 pounds on each ball, which is double the force of a rifle ball; the balls are placed in a funnel on the top of the gun from which they run in as fast as they are discharged.

At the late session of the Kentucky Legislature, they granted a charter for a new bank, to be styled the Northern Bank, with a capital of \$3,000,000; subscription books for the stocks of which were opened throughout that state on Monday, the 20th ultimo, and from the towns heard from, the Argus says, the stock would have been all taken, had the capital been ten instead of three millions. The towns of Maysville, Paris and Lexington, the first three days, subscribed for upwards of a million.

The lot next door to the office of the New York Evening Star, in Bleeker street, in that city, 31 feet front and 75 feet deep, sold a few days since at public auction, for the enormous sum of \$51,500, being a fraction over \$1661 29 cents per front foot. Real property in all the Atlantic cities, has advanced in value to a very great extent.

The passengers in a stage, on the 11th ult., whilst crossing the bridge over Ogeechee, made a most miraculous escape. The bridge giving way, the whole were precipitated into the river below; but the sills and flooring of the bridge going down together, remained so, and thus supported the stage, and resting on the pilings of the old bridge, which were cut off a few feet below the surface of the water, the stage did not turn over. The passengers, men, women and children, were with much difficulty, in a short time, rescued from their perilous condition. Neither the passengers nor stage were injured.

Books of subscription for stock in the Sandy and Beaver Canal, a work intended to connect the Pennsylvania and Ohio public works, will be opened in Philadelphia, on Monday next.

A very destructive storm occurred at New York on the night and morning of the 27th, and 28th April. At 6 o'clock on the evening of the 27th, the storm commenced from the north east, with greater violence than any since that of November, 1833. The rain fell in torrents during the night, and continued until 8 o'clock the succeeding morning. A number of vessels were sunk and otherwise injured. The battery wall is considerably damaged as well as a pier at Whitehall. It extended with equal violence all along the north eastern coast.

The brig Bourne, Capt. Ganteaume, of Baltimore, with emigrants for Cape Palmas, arrived at Liberia on the 31st of January; the Bourne sailed from Liberia in company with the Sch. Edgar, arrived at New York, on the 8th March, with the Rev. Mr. Seyes, missionary of the M. E. church, Dr. Skinner, and several others on board. The Dr. had not heard at the time of his sailing of his appointment as colonial agent. The Rev. Mr. Pinney, as well as the colonists, generally, were in good health.

Mr. Mills, the engineer has published a very interesting letter on the application of steam, to canal navigation, in which he says that the oft repeated experiments prove the impracticability of using with advantage steamboats on canals, and proposes as a substitute, steam power for horse power on the tow path. All the experiments to test the effects of velocity, upon the banks of a canal in England, have resulted in the important discovery, that, in the ratio of increase of speed of the boat, is the decrease of resistance from the waters, and consequently, the greater velocity the less injury to the banks from agitation or surge. The faster a boat is drawn, the higher it raises out of the water, the resistance producing the effect of lifting it over the wave. The observations made in England on this point, Mr. Mills has verified in this country. Great speed, thus ascertained to be preservative instead of destructive of the canal, can only be obtained by the substitution of steam for horse power.

The receipts of the Schuylkill canal, (Pa.) this season, up to the week ending the 24th April, have

been \$49,643 54 cents. That of the Union Canal, for the week ending on the same day, were \$5,439 97 cents; both the canals have done a greatly increased business the present, over any season of former years. Indeed, travelling and transportation are increasing in every direction of our country, and the spring though thus far, not marked by much "etherial mildness," has been distinguished for great activity in business.

At the annual term of the Court of Common Pleas, for Stark county, Ohio, *fifty-four* persons were indicted for gambling, and *thirty-one* found guilty.

Mecklenburg Declaration.—The citizens of Mecklenburg County, N. Carolina, are making arrangements to celebrate, in an appropriate manner, the 20th day of May proximo, the 60th Anniversary of the Declaration of Independence made by the Patriots of that county. Franklin L. Smith, Esq. has been selected to deliver an oration on the occasion, and Jas. W. Osborne, Esq. to read the said Declaration.

Major George Bender has been appointed commissioner of the Chesapeake and Ohio Canal, and the works of the company will, in future, be conducted under his superintendence. The appointment has been made under a recommendation of the stockholders.

The tax on malt liquor in Great Britain, is stated to be £4,000,000 sterling per annum, about twenty millions of dollars.

STANZAS,

SUGGESTED BY THE DEATH OF AN INFANT DAUGHTER.

"Ere sin could blight, or sorrow fade,
Death came with friendly care;
The op'ning bud to Heaven convey'd,
And bade it blossom there."

Our child is gone! the rose is dead!
How short—how fleet its bloom!
The grass is springing o'er its head
While mould'ring in the tomb.
A mother's love could not withhold
It's MAKER's high behest—
But ere misfortune, dark and cold,
Had cross'd its tender breast,
He took it from her clasping arms,
With all its smiling, mortal charms.

Alas! sweet, innocent, and mild,
Ere three brief years it fell—
And now she's mother to a child
Where seraph spirits dwell.
Transplanted to the Eden land,
It lives to bloom again;
And nourished by a kinder hand,
'Twill know no grief nor pain:
But flourish in the bowers above,
The clime of bliss—the home of love.

Our child is gone! her voice no more
May break upon the ear;
Her lightsome step across the floor
We may no longer hear.
Each little toy she's left behind
Familiar to her sight—
But harps of praise and songs refin'd
Are now her chief delight:
And soon, dear parents, ye may rise
To hail your kin beyond the skies.

New York, April, 1835.

J. J. R.

CONTENTS OF THIS NUMBER.

Proprietors' Address—Editor's Address—Regret to a Correspondent—Potato Culture—Notice of the Turf Register—Doob Grass—Native Tea Shrub—Early Cucumber—Ribbon Grass—Stump Lifter—Effects of high Cultivation—Report of Maryland Horticultural Society—Manual for the culture of Potatoes—Beets—New species of Potato—Foreign Abstract—Domestic Summary—Death of an infant—Prices Current—Advertisements.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,	bushel.	2 50	3 00
CATTLE, on the hoof,	100lbs.	6 50	7 50
Slaughtered,	"	73	75
CORN, yellow,	bushel.	72	73
White,	"	75	78
COTTON, Virginia,	pound.	17 1/2	18
North Carolina,	"		
Upland,	"	18 1/2	20
FEATHERS,	pound.	35	37
FLAXSEED,	bushel.	1 50	1 90
FLOUR—Best white wheat family, ..	barrel.	6 50	7 00
Do. do. baker's,	"	6 00	6 50
Do. do. Superfine,	"	5 00	5 50
Super Howard street,	"	5 50	
" wagon price,	"	5 25	
City Mills, extra,	"		
Do.	"	5 25	
Susquehannah,	"	5 00	
Rye,	"	4 00	4 50
GRASS SEEDS, red Clover,	bushel.	5 00	5 25
Timothy (herds of the north) ..	"	2 50	3 00
Orchard,	"	nene	
Tall meadow Oat,	"	2 00	2 50
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.	16 00	18 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
HOGS, on the hoof,	100lb.	6 00	6 75
Slaughtered,	"		
HOPS—first sort,	pound.	12	20
second,	"	10	
refuse,	"	8	
LIME,	bushel.	33	35
MUSTARD SEED, Domestic,	"	5 00	6 00
OATS,	"	36	40
PEAS, red eye,	bushel.		
Black eye,	"		1 50
Lady,	"		
PLASTER PARIS, in the stone,	ton.	3 25	3 31 1/2
Ground,	barrel.	1 37	
PALMA CHRISTA BEAN,	bushel.	2 00	
RAGS,	pound.	3	4
RYE,	bushel.	75	78
Susquehannah,	"	81	
TOBACCO, crop, common,	100 lbs	4 00	
" brown and red,	"	5 00	7 00
" fine red,	"	7 00	9 00
" wraperry, suitable	"		
" for segars,	"	6 00	12 00
" yellow and red,	"	8 00	12 00
" yellow,	"	9 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality, ..	"	4 00	5 00
" ground leaf,	"	5 00	9 00
Virginia,	"	5 00	10 00
Rappahannock,	"		
Kentucky,	"	6 00	9 00
WHEAT, white,	bushel.	1 15	1 20
Red,	"	1 15	1 18
WHISKEY, 1st pf. in bbls.	gallon.		36
" in hhd's,	"		35
" wagon price,	"	31	32
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	2 25	
To Wheeling,	"	2 50	
WOOL, Prime & Saxon Fleeces, ..	pound.	52 to 75	26 to 28
Full Merino,	"	52	62 24 26
Three fourths Merino,	"	45	52 23 24
One half do,	"	40	45 23 24
Common & one fourth Meri. ..	"	35	40 22 24
Pulled,	"	35	38 23 26

FOR SALE,

A BROOD MARE about 15 hands high, color black, fine form and action. Apply at this office. May 5th.

POINTER.

A FIRST rate Pointer Slut, of pure blood, 6 months old, for sale at this establishment. mh 17

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.		
BACON, hams, new,	pound.	10	11
Shoulders,	"	8	9
Middlings,	"	8	
BUTTER, printed, in lbs. & half lbs. ..	"	31	37 1/2
Roll,	"	20	28
CIDER,	barrel.		
CALVES, three to six weeks old, ..	each.	3 00	6 00
COWS, new milch,	"	17 00	30 00
Dry,	"	8 00	12 00
CORN MEAL, for family use,	100lbs.	1 70	1 75
CHOP RYE,	"	1 62 1/2	
EGGS,	dozen.	10	12
FISH, Shad, fresh,	per 100	11 00	12 00
H. rings, salted, No. 1,	"	4 75	
Mackerel, No. 1, 2 & 3,	"	5 50	6 75
Cod, salted,	cwt.	2 25	
LAMBS, alive,	each.	1 25	2 00
Slaughtered,	quart r	37	50
LARD,	pound.	9	10
ONIONS,	bushel.	75	100
POULTRY, Fowls,	dozen.	3 25	
Ducks,	"		
POTATOES, Irish,	bushel.	87	100
Sweet,	"	1 25	1 50
TURNIPS,	"		
VEAL, fore quarters,	pound.	3 1/2	4
Hind do.	"	6 1/2	

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	paid	VIRGINIA.
Branch at Baltimore,	do	Farmers Bank of Virginia, 1/2 a
Other Branches,	do	Bank of Virginia,
MARYLAND.		Branch at Fredericksburg do
Banks in Baltimore,	par	Petersburg,
Hagerstown,	1/2 a	Norfolk,
Frederick,	do	Winchester,
Westminster,	do	Lynchburg,
Farmers' Bank of Mary'd, do		Danville,
Do. payable at Easton,	do	Bank of the Valley,
Salisbury,	uncertain	Branch at Romney,
Cumberland,	1/2 a	Do. Charlestown,
Millington,	do	Do. Leesburg,
DISTRICT.		Wheeling Banks,
Washington,		Ohio Banks, generally 3/4 a
Georgetown,	1/2 a	New Jersey banks gen. 1 1/2 a
Alexandria,	1/2 a	New York City,
PENNSYLVANIA.		New York State,
Philadelphia,	1/2 a	Massachusetts,
Chambersburg,	1/2 a	Connecticut,
Gettysburg,	do	New Hampshire,
Pittsburg,	1 1/2 a	Maine,
York,	1/2 a	Rhode Island,
Other Pennsylvania Bks. 1 1/2 a		North Carolina,
Delaware [under \$5],	3/4 a	South Carolina,
Do. [over 5],	1/2 a	Georgia,
Michigan Banks,	5 a	New Orleans,
Canadian do.	5 a	

ADVERTISEMENTS

BUFFALO BERRY TREE.

SINCE it was ascertained that this tree is diæticous (the male and female being distinct trees) we have hesitated to send it when ordered, because our trees are too young yet for their sex to be developed. Under these circumstances we propose to furnish single trees (the sex being unknown) on the following terms:—Trees less than two feet in height at 50 cents each, and those above two feet at 75 cents a piece. When their sex shall have been ascertained we will furnish either male or female trees at \$1.25 each, and at \$2 per pair. By this arrangement time may be gained by taking young trees this spring and putting them out, relying on the future for mates for them, and nothing can be lost in point of price of them. We have a few from 1 1/2 to 3 feet high, which we will put up to order on the terms above stated.

SINCLAIR & MOORE.

March 31, 1835.

FRESH GARDEN SEED.

THE Subscriber has just received by the ship Canada a splendid assortment of English and Dutch Garden and Field Seeds. The respectability of the gentleman by whom these seeds were raised warrants me in recommending them with perfect confidence. But to be certain of the quality and to prevent disappointment to purchasers, proof samples of each sort are taken and will be fully tested in hotbeds prepared for the purpose.

The most prominent received are—

600 lbs. Cabbage Seed, principally of Early Scotch York, Large York, Bullock's Heart, Early George, Sugar Loaf, Drum Head and Flat Dutch. The above named Early York is the dwarf or short stalk variety raised by one of the first Gardeners near Edinburgh.

500 lbs. Mason's short top scarlet, red, and white Turnip, long white and salmon Radish Seed.

50 lbs. Salsafy or Vegetable Oyster.

8 bushels broad Windsor, long pod, and other English Beans.

10 lbs. Early and Late Cauliflower Seed, raised from the large Dutch Cauliflower. The quality of this seed may be estimated by reference to the Cauliflowers, whose merits received the premium from the Horticultural Society last year.

10 lbs. Broccoli Seed, fines English sorts.

100 bushels Early and Marrowfat Peas, among which are Bishop's early Dwarf, Spanish Dwarf Fan and Knight's Dwarf, Honey, all fine new sorts, very prolific and growing, only 12 inches high.

375 lbs. Early Dutch Turnips, white Tankard, Yellow Bullock, White Globe and Dale's new Hybrid Turnip Seed.

15 lbs. Borecole or Kale Seed of various sorts.

FIELD SEEDS.

30 bushels St. Foin or Esparset and Field Burnett; Spring Vitches or Tares; 100 lbs. Mangold Wurzell; 10 bushels early Potatoes; 5 best English sorts; 10 bushels English Lawn Grass; 200 lbs. Mustard Seed; 15 bushels Perennial Ray Grass; 300 lbs. Rape or Cole Seed; 20 bushels English Oats; 3 best sorts; 300 lbs. white Dutch Clover; 360 lbs. Lucerne; also a small parcel of Yellow and Scarlet Trefoil, &c.

IN STORE.

Parsnip Seed, Carrot, Lettuce, Beet, Cress, Cucumber, Cantaloupe, Onion, Squash, Corn Salad, Artichoke, Swiss Chard, Celery, &c. Nearly all the last named Seeds were raised by R. S. Senr. at the Clairmont Nursery, and are of the finest quality.

Orders for Fruit Trees, Shrubs and Plants received. For particulars, see catalogues, to be had gratis.

ROBERT SINCLAIR, Jr.

At Sinclair & Moore's Maryland Agricultural Repository, Light near Pratt street. March 3.

TERMS OF THIS PAPER.

1. Price five dollars per annum, payable in advance. When this is done, 50 cents worth of any kind of seeds on hand will be delivered or sent to the order of the subscriber with his receipt.

2. The manner of payment which is preferable to any other for distant subscribers, is by check or draft on some responsible party here, or else by remittance of a current bank note; and to obviate all objection to mail transmission, the conductor assumes the risk.

3. Subscriptions are always charged BY THE YEAR, and never for a shorter term. When once sent to a subscriber the paper will not be discontinued (except at the discretion of the publisher) without a special order, on receipt of which, a discontinuance will be entered, to take effect AT THE END of the current year of subscription.

4. Subscribers may receive the work either by mail in weekly numbers, or in monthly or quarterly portions; or else in a volume (ending in May annually), handsomely pressed, half bound and lettered (to match with the American Farmer) by such conveyance as they may direct: but the \$5 must in all these cases be paid in advance.

ADVERTISEMENTS relating to any of the subjects of this paper will be inserted once at one dollar per square, or at that rate for more than a square, and at half that rate for each repetition.

Printed by Sands & Neilson, corner of Calvert and Market street.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 2.

BALTIMORE, MD. MAY 12, 1835.

Vol. II

THIS publication is the successor of the late
AMERICAN FARMER.

and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, MAY 12, 1835.

SILK CULTURE.

The following remarks, on the culture of Silk, and the propriety of introducing it into the Alms-house of Baltimore city and county, is most respectfully addressed to the favorable consideration of the Mayor and city council of Baltimore, the Commissioners of Baltimore county, and the trustees for the Poor of said city and county, by the editor of the Farmer and Gardener, in the fond hope, that the suggestions thrown out may serve to bring into notice a branch of industry of incalculable value to the nation, and which, he also believes, if adopted and prosecuted with intelligence and energy at the Alms-house, would in a few years relieve the city and county from the entire burthen of the cost of its support.

We insert, in the present number, a very interesting and useful letter of Judge Spencer, of New York, on the subject of the cultivation of silk in this country. The facts to which he refers, are both important and encouraging to such as have the means and disposition of entering into it. He estimates the net profits of twenty acres set in an orchard of mulberry at from \$3,000 to \$5,000 per annum. This, to those who have not particularly investigated the subject, may seem an exaggerated, if not startling sum. To us, however, it appears to be greatly under the amount which may, by judicious management, be realized from an orchard of twenty acres thus planted.

We are pleased with his suggestion, of adopting the culture of silk in Alms-houses, and have been, for several months, contemplating submitting a proposition to that effect to the trustees of the Alms-house of Baltimore city and county; having cursorily mentioned the subject to a gentleman recently a trustee, without entering into any particulars, early last fall; remarking—that we thought we had a plan in our mind, the which, when matured, we would submit to his consideration—a plan, by

which, we thought, we would be able in a very few years to make that establishment support itself. As our incessant occupation, has not hitherto afforded us the leisure to carry out our intentions, as then intimated, we will seize this, the first occasion which has presented itself, of so doing. It will now answer the two-fold purpose, of showing the practicability, we hope, of our views as then expressed, sanguine as they were, and of encouraging planters and farmers generally, throughout the country, (though it may fail of the other object) to turn their thoughts seriously to a proper consideration of the advantages and disadvantages which are likely to result from the proposed culture of the mulberry, management of the silk worm, and fabrication of silk. This is all we desire of them, being fully convinced that a dispassionate examination, must inevitably lead to such convictions of utility, as cannot fail to raise up zealous friends in all directions.

From the facts stated by Judge Spencer, it appears that silk worms have been raised in Windham county, Conn., ever since 1760, a period of seventy-five years: that during the last year, in the town of Mansfield, in the same state, there were produced \$60,000 worth of silk; and that in Windham county, also in the same state, \$500,000 worth were made during the same period.—These results are truly flattering, and show, most conclusively, what is within the power of American industry and skill to accomplish, when guided by well directed enterprise.

The amount of silks imported into our country last year, was \$10,000,000, and the demand must be increased with its annual growth in population and resources. Hence then, every inducement which a perfectly practicable plan of entering into a new and lucrative branch of industry, a ready sale, and, an increasing demand, to almost an unlimited extent, can offer, is presented to urge our agriculturists to its adoption. Having premised this much, we will proceed to discuss the subject of profit, believing that to be the only debateable question involved, inasmuch as by experience, it is proved beyond all dispute, that silk may be produced in the United States, to as great advantage as in any part of the world—and taking the opinion of a gentleman, whose opportunities of judging entitle it to consideration, as our guide—of a

quality equal, if not superior to any raised in Europe.

We before remarked, that we were pleased, with Judge Spencer's suggestion, of introducing the culture of silk into Alms-house establishments, and we will here observe, that in addition to the great relief, which such a step would be, in a pecuniary point of view, to the inhabitants burthened with the tax of each poor house, the example which would be thus set, would tend to stimulate individuals to enter into the business, so that in a few years, the article of silk, instead of being an annual *tax upon our people of ten millions* and upwards, would form an important item in our *exports*, thereby adding to individual wealth, and augmenting the field of national resources.

With a view of demonstrating the feasibility of the plan to which we have before alluded, for defraying the expense of the Alms-house of Baltimore city and county, we shall enter into a course of calculations, from whose results the reader will be able to judge, whether our opinion is sustained by the data upon which it has been formed, or not. These calculations will enable those interested, to apply them as circumstances may require, and though local in their present application, will avail as well for one part of the country as another, or for individuals, as well as for corporate bodies.—In what we may say on this subject, we claim no credit on the score of originality, we have no experience of our own, the facts and opinions advanced, being derived from the writings of others—and from none have we drawn more freely than from those of Mr. Daniel Bradley, of the state of New York, Dr. Mease, of Philadelphia, Mr. Gideon B. Smith, of this city, and Mr. Elias Frost, of Plainfield, Massachusetts—gentlemen who have all devoted many years to the study of this branch of industry, whose experience in the culture of the silk worm, and whose active, discriminating minds, and patient research, eminently qualify them for the purposes of instruction.

Mr. Frost, from an experiment which he details in a very interesting letter dated August 27, 1833, has proved that 1243 cocoons yielded 7½ ounces of reeled silk, being equal to rather better than 18½ ounces to 3000 worms, or one pound to a fraction less than 2527 worms.

Mr. Bradley gives it as his opinion, that, at a

moderate calculation, 3000 worms will make a pound of reeled silk.

The cocoons of Mr. Frost (1243) weighed 4lbs. 5oz. in the aggregate, and 20 of them weighed 10z.; these last we presume, were picked, as that is above the average weight. The worms as fed by Mr. F. consumed on an average 5 lbs. of leaves to each 100, during their feeding. This consumption of leaves corresponds, according to the account of Dr. Mease, with singular exactness with the experience of the Bavarian silk culturists, where 20,000 worms devour, during the feeding season, 1000lbs. of leaves, being precisely 5lbs. to each hundred; we are thus able to calculate to a certainty the requisite quantity of leaves to sustain any given number of worms.

It is thus demonstrated by the actual experiment of Mr. Frost, that 3000 worms are able to make upwards of $18\frac{1}{2}$ ounces of silk, which would be a difference of rather better than $12\frac{1}{2}$ per cent in favor of the culturist over the computation of Mr. Bradley: but as in calculations of this character, we would always prefer to be under rather than over attainable results, we shall adopt the opinion of Mr. B. as the basis of our calculation. He as we have before shewn, affirms with confidence, that at a moderate and safe calculation, 3000 worms will produce a pound of reeled silk.

Mr. Smith informs us that a full grown mulberry tree [the white mulberry, we presume] will produce foliage enough to feed 5,000 worms; but that in order to provide against failures and loss of leaves, and to save the trees from excessive cropping, it is better to have double the number of trees; and in a matter of this kind his opinion is entitled to great weight; and, therefore, in the calculation we shall make, we shall not fail to provide against the contingencies of which he speaks.

Having thus stated the consumption of food and probable produce of the worms, we will proceed to our remarks. If the trees to be selected should be the *white mulberry*, they could either be planted in square rows, or in hedges, as might best suit the fancy or taste of the party, or the dimensions of the ground, and would probably answer as well in the latter way, and yield as much provender, as in the former. Of this we will not pretend to speak with certainty, deeming it at present an unimportant consideration. Mr. Bradley thinks that 3,000 trees might be arranged in hedges, and otherwise, on a single acre of ground; but if it be desired that the white mulberry should attain its full size and maintain vigor and freshness of foliage, twenty feet apart would be a proper distance; and if at this distance, an acre would hold 108 trees, and would have this advantage; that the orchard could be, with decided benefit to the trees, subjected to other culture. If this distance should be thought too great, it might be reduced to 6 feet, which would be space enough until the trees should arrive at maturity, when if thought advisable, they might be alternately thinned out. At six feet, however, we believe the ground would be lost to other culture. As to this we are not particular, and shall leave it to the persons interested to decide for themselves. Should the plant selected be the *Morus Multicaulis*, the space might be still more reduced, say to four feet, or less, indeed, one way; but where ground is not an object, we should prefer room for free circula-

tion of light and air, and a vigorous stretching forth of limbs. In order, however, to have some specific data, whereon to ground our subsequent calculations, we propose, that the authorities of Baltimore city and county should appropriate 40 acres of their farm to a mulberry orchard, which at 1 tree for every 20 square feet, would give them 108 trees to the acre, or 4,320 trees to the 40 acres, as:

108
40

4320 trees on 40 acres.

Now it is stated by Mr. Smith, that one full grown tree will furnish food for 5,000 worms, so that the trees on the entire orchard will feed 21,600,000 worms, as:

4320
5000

21,600,000 worms to be fed on 40 acres.*

* It is computed by Mr. D'Homergue, that each tree at 6 years of age will yield 30lbs. of leaves, so that, we think, in order to secure a certain supply of provender for the worms, at the earliest period, it would be best, in the first instance, to plant the trees at 6 feet square apart, which would give us 1210 trees to the acre, and as before suggested, these could be thinned out as occasion might require. These 1210 trees to the acre would give us 48,400 trees on the 40 acres, which at 30lbs. of foliage to each tree, would yield 1,452,000lbs. of leaves, and as 75lbs. of leaves is competent to the support of 1500 worms, so would the total yield of leaves just quoted, sustain 29,040,000 worms, being an excess of supply for the 21,600,000 worms, as assumed by us, of nearly 40 per cent., an amount quite sufficient to provide against the contingencies as mentioned by Mr. S. It is also thus proved, that an acre of ground is capable of raising 726,000 worms.

In Mr. D'Homergues' statement, he assumes, 1. that there are 45,539 square feet in an acre, and 2. that 3000 trees at 6 feet square may be planted on an acre. In neither of which conclusions is he right. The English statute acre, which is the acre of our country, contains 160 square poles or perches; the statute length of a pole or perch is $5\frac{1}{2}$ yards or $16\frac{1}{2}$ feet. If we multiply $5\frac{1}{2}$ yards by itself to get its square, it makes $30\frac{1}{4}$, the number of square yards in a pole or perch; and this last number multiplied by 160, the number of perches in an acre, will give us 43,560 square feet in an acre: so then, the square of 6 being 36, that number becomes the divisor, which will go 1210 times in the number of square feet in an acre, as:

36) 43560 (1210

36

75

72

36

36

. 0

The French arpent or acre, is equal to 54,450 English square feet, and as the measure set down as assumed by Mr. D'Homergue, is neither that of England nor France, we incline to the belief that

These at the ratio of yield as tested by the experiment of Mr. Frost, would produce a fraction over 8,417lbs. of silk, as:

21,600,000
7 $\frac{3}{4}$

151,200,000
10,800,000
5,400,000

16)

1243) 167,400,000 (134,674 oz. silk.

1243

8,417 1-8 lbs. silk.

4310

3729

5810

4972

8380

7458

9220

8701

5190

4972

218

which at \$4 per lb., the lowest price, would amount to \$33,668.

But as we are disposed not to excite too sanguine expectations, we prefer to take the ratio of Mr. Bradley. He says as before stated, that 3000 worms will make a pound of reeled silk, which will yield an aggregate of 7,200lbs. of silk for the 40 acres of mulberry, or 21,600,000 worms, as:

3,(000) 21,600,(000

7,200 lbs. of silk.

The value of this silk bears a strict relation to the degree of skill with which it may be reeled, and Mr. Bradley justly observes, that it always may, by proper care and attention, be *well reeled*. He also says that if the silk be of first quality, from \$7 to \$10 per pound may be procured for it: by others, the value of it is set down at from \$4 to \$5 and \$8 per pound. The value of the raw silk in this country, however, cannot be supposed to be settled, as the culture is but in its infancy, and purchasers, consequently, few in number. Let us however enter into the calculations:

7,200 lbs of silk at \$4 per lb., is	\$28,800
7,200 do 5 "	36,000
7,200 do 7 "	50,400
7,200 do 8 "	57,600
7,200 do 10 "	72,000

it is a misprint; but we are at a loss to conjecture how he could arrive at the conclusion, that 3,000 trees could be placed on an acre of ground 6 feet square apart. Whatever may be the required distance, its number must be multiplied into itself to furnish the divisor, which being divided into the number of square feet in an acre, the quotient will be the number of trees which can be placed thereon. The rule is a simple one, and if recollected, would be of great service to farmers, gardeners, and others, interested in transplanting trees or plants.

If we take the average, which is } 48,960
 \$6.80 per lb., we have

It must then be admitted, if the data assumed be correct, that each acre of the land will yield \$1224, at the average of the prices stated, or at the lowest estimated value, \$720 to the acre.

Now then, let us compare the expense of supporting the poor of Baltimore city and county, for the year ending April 30, 1834, with the value of the silk at the minimum price.

City's part	\$18,348 74 $\frac{3}{4}$
County's part,	4,500 00

\$22,848 74 $\frac{3}{4}$

Lowest estimated value of silk 28,800 00

Excess of silk culture, the low- }
 est estimate being compared } \$5,951 25 $\frac{1}{4}$

Thus then, it appears that 40 acres set in mulberry properly cultivated, and the worms judiciously managed, will at the very lowest value which has been set upon silk, be more than sufficient, by nearly \$6,000, to meet the the gross expenditures, incident to the support of the poor of the establishment in question, and to leave a sum more than equivalent for interest on the outlay of land employed, fixtures, &c. For ourselves we do not see why the maximum price could not be realized for the silk raised there, as from the perfection to which *reels* have been brought in this country, nothing but the most culpable neglect—the most wanton carelessness—could possibly prevent the operation of reeling being well performed. And as the worms would require attention but about from five to six weeks in the year, we cannot perceive any good and sufficient reason, why some branch of silk manufacture should not be connected with the culture of it, so as to occupy the time of such of the inmates, the remainder of the year, as might not be otherwise engaged.—For instance, by the conversion of the raw silk into yarn, and the manufacture of stockings, by means of the newly invented *knitting machine*, of which a description is given in this paper,—a machine which is said by the aid of a child to perform the work of *six expert knitters* in the old mode. The labor of the paupers could be thus turned to a profitable account, employment of a delicate and beautiful kind given them, and whenever the income of the establishment exceeded its expenditures, to an amount worthy of consideration, it might be appropriated to meet the other charges upon the city and county, and thus relieve the citizens of the former of a portion of those onerous burthens which in the furtherance of great objects of internal improvement, have, necessarily, been imposed upon them.

It has been stated by some writers, that an acre of ground could be so planted with mulberry trees—for instance, in hedges—as to make it yield foliage enough to feed a million of worms, and others have gone so far as to say two millions: but in calculations of the kind, it is always safest not to be too sanguine, and especially in the present instance, when the space of a few acres of ground is no object.

As to the labor, that is by no means an important consideration, as two persons are competent to attend to a million of worms for the first week, four for the next week, eight for the third, and from sixteen to twenty for the remainder of the time, which may be from ten days to two weeks,

and there is but very little of the necessary labor to be performed, that cannot be done by boys and girls, women, and aged and decrepit people.

The ground occupied in the mulberry orchard, could, as we have before premised, advantageously to the young trees, be occupied in the cultivation of potatoes, or some other roots, or in clover for three or four years, so that it would not cease to be profitable, even while thus maturing for its ultimate object; and, indeed, after the trees should have attained their growth, they would experience no injury, if not benefit, from a crop or two of clover being taken from the soil every three or four years, especially if during that time a generous carpet of that luxuriant grass were ploughed in.

It is stated that a room 40 by 80 feet, will accommodate a million of worms, and as nothing but the cheapest materials and work is requisite, a range of buildings 2 stories high, sufficiently spacious to accommodate all the worms to be fed from the foliage of the 40 acres of mulberry, together with all necessary fixtures, could be put up for less than five thousand dollars, which, in fact, would be the chief outlay. This sum may be thought by some too small; but we wish it recollected that we are speaking of the *necessary* expenditures, and not of what *might* be expended, or *sacrificed* to taste. We once knew a gentleman who built a barn which cost him fourteen thousand dollars, whereas his neighbor put up one for a less number of hundreds, which answered all the valuable purposes of his farm equally as well, as did the costly one, those of that of his neighbor. In matters of the kind, *utility* and *not display* should be consulted. The cost of the reels are about 12 dollars a piece, so that they form but a small item in the outfit.

While we are thus submitting our plan to the official authorities alluded to, with a view of lessening the *general* burthens, we would fain say a word to the farmer who may be the owner of a small farm, and who, after toiling from the beginning to the end of the year, finds himself barely able to keep the sheriff from the door—as also to the widow, surrounded by her orphans, who may be the proprietor of a few acres,—to these we would say,—if you desire to provide yourselves and offspring with the sure means of competency, lose no time in obtaining a few mulberry trees, and *commence* the silk culture. If you cannot spare money enough to buy trees sufficient to set out an acre, try and procure as many as will set out a half—a quarter, or an eighth of an acre—*make a beginning*, and then continue your good work till you accomplish your acre of trees: when that is done, you may each look upon yourself as enjoying that glorious state of independence which will enable you to live in comfort, rear and educate your children, and do justice to your neighbors. Think not that we are indulging in any other feeling than that of seriousness, when we declare to you, that an acre of mulberry trees well cultivated will yield you more *clear profit* than all the rest of your respective farms, though they may each number two hundred acres, and that the necessary labor can be performed without *extra* expense, and without injuriously interfering with your attention to the other departments on your estates. Do not let the fear of the cost of a building deter you. You

have each and all the materials of construction in your woods, and you and your hands, if you so will it, can in a few weeks cut down and hew, or saw out, a sufficient number of uprights or posts, and weather boards, to make a house *good enough* for the purpose—that is all you should aim at.

In conclusion let us advise you, *to make a beginning*. An acre thus improved and well managed, would yield an amount of silk upon which you may realize an *annual income* of from \$720 to \$1,800; the precise amount being solely within your own power of regulation—being dependent on the care with which you may attend and feed the worms, and perform the reeling, and the degree of value which you thus impart to the silk—so that, in fact, the *measure of your reward* is perfectly within your own control.

CULTURE AND MANUFACTURE OF SILK.

ALBANY, APRIL 7, 1835.

TO SAMUEL M. HOPKINS, Esq. }
 Geneva, Ontario county. }

From a long acquaintance, and, as I believe, a reciprocal esteem and friendship, I have thought that I could not better employ a leisure hour, than in addressing you on a topic which I regard as of high importance to our fellow citizens. You will not suspect me of insincerity or flattery, when I assure you that I know no man, whom I believe to have more enlightened views, or more ardent patriotism than you. Hence the propriety of my selecting you as a correspondent on the interesting subject which I proceed to state.

Since 1830 my attention has been drawn to the consideration of the culture of silk in this country, and particularly in this State. I am perfectly satisfied that no agricultural pursuit will bear any comparison with the culture of silk, as regards profit. I should not want a better income than the clear profits of an orchard of white mulberry trees, of twenty acres of ten years old.—The clear nett profits of such an estate would not fall short of from \$3000 to \$5000 annually; and this profit would go on increasing with the growth of and the productiveness of the trees.

You have seen a communication made by me to the commissioners appointed by the Governor, to examine into the economy, government, and discipline of the State prison, which has been published, not, however, extensively. It contains some matter irrelevant to the culture of silk, and omits some things interesting to those who may embark in the enterprise. You must have observed as a statistic, that our annual import of silk amounts to the value of \$10,000,000, and will increase with our wealth and population. This amount far exceeds the value of all our bread stuffs exported. This consideration ought to excite us to the inquiry, whether such a drain from the resources of the country cannot be prevented; a new source of industry be opened, which shall in a short period supply our own wants, and enable us to become exporters of either raw silk, or silk fabrics.

I consider it as a fact demonstrated, that our soil and climate is genial to the growth of the mulberry tree, and the culture of silk. Trees of this description are already growing and flourishing in various parts of the State, and I presume that the portion of this State from Skeneatales to Lake Erie, is peculiarly adapted to the mulberry, from

the fact that the most delicate fruit trees come to great perfection within that region. Since 1760, the silk worm has been reared in Windham county, Connecticut, which is about the latitude of Albany. The culture of silk has been successfully prosecuted in that county, and it has reached to a large amount. The following is an extract from the Daily Advertiser of the 15th instant: "*American Silk*.—Raw Silk, we learn from the Burlington Free Press, has been produced this year in Mansfield, Connecticut, to the amount of over \$60,000. The county of Windham, Connecticut, produced five tons of silk annually, valued at \$500,000, and if reeled would be worth double the sum." If this be true, and that it is substantially true I fully believe, the question is settled that the soil and climate of this State is genial to the culture of silk. It settles also another question, that it is much the most profitable business that can be undertaken.

We have the testimony of Mr. D'Homergue, a man born at Nismes, in France, and brought up from infancy to the reeling and manufacture of silk, and who came to this country on the recommendation of the late James Brown, then Minister in Paris, who asserts in his essays that he was surprised to find the American Silk superior in quality, and the quantity yielded by the cocoons, to any he ever saw. But, my dear sir, could you have seen specimens of American silk exhibited in this city a few days since, manufactured by Mr. Gay, all doubt would be removed. These specimens were pronounced by the many who saw them to be equal, if not superior, to any silk which had ever been seen here.

Now, sir, what are the impediments to be overcome, in introducing the culture of silk extensively in this State? And here let me observe that there is no danger of overdoing the business; there will always be a demand in England for all we can raise beyond supplying our wants; where, from the humidity of the climate, or other causes, the silk is not reared.

It is necessary to devote a small space of good and fertile ground, as a nursery in which to sow the seeds. It is computed that one ounce of seed, properly sown, after the ground is thoroughly ploughed, or dug and harrowed, or raked and sown, in drills, at about three feet apart, will give about five thousand young trees. They require to be kept free from weeds, and injury from cattle. At two years of age they are generally fit for placing in an orchard at the distance of from seven to twelve feet, at right angles—and here the labor of man terminates. All the subsequent culture may be conducted by women and children. They pluck the leave, and feed and tend the worms until the cocoons are formed; so that you perceive the culture of silk detracts nothing from agriculture.

The greatest embarrassment hitherto has been the extracting or reeling the silk from the cocoons. The reels of France and Italy, and indeed of all parts of the world, receive the thread, which consists of the fibres of several cocoons, according to the requirement of the fabric to be made, in skeins, which must be spooled before it can be twisted. Two of our countrymen, Messrs. Gay and Moseley, have invented a reel which receives the thread on spools, and thus the labor and wastage of the old process is avoided. Mr. Gay assures me that

an ingenious woman can be taught, in a short time, to reel, on his reel, with great perfection. A great advantage of reeling on to spools consists in its safe easy carriage any distance without injury. We have, therefore, surmounted the most difficult process in the whole operation.

These gentlemen have also employed the several machines in use in France and England in the manufacture, so that it will require but a comparatively small capital to establish manufactories of silk in the country.

When we consider how admirably adapted to silk are our County Poor-House establishments; how the wants of the poor may be mitigated by inducing them also to enter on the culture, by obtaining leaves of the mulberry from their rich neighbors; how the middle classes of society may improve their condition by entering on the culture of silk; I feel, I confess, a strong desire to be able to persuade people to lose no time in laying the foundation of their culture by immediately setting about it in earnest, and not to let any thing hinder them from sowing the mulberry in the manner indicated this spring.

The *morus alba*, or white mulberry, I am satisfied is the most proper for making the best silk; the purple mulberry, which is indigenous to some parts of our country, although it will make silk, yet it is not of as good a quality. The *morus multicaulis*, or Chinese mulberry, has recently been introduced into this country, but it is apprehended that it will not withstand our rigorous winters; and as the common white mulberry will withstand them, and make excellent silk, I should not recommend the propagation of the Chinese.

I forbear saying any thing on the mode of rearing the worm. I am satisfied that it does not require the care and pains to rear it in this country, which the precepts of Count Dandolo would imply. In due time instructions will be given level to every capacity. May I not count on your co-operation in this most important object.

With sincere respect and esteem, yours,

A. SPENCER.

A COCOONERY.

Mr. Samuel Whitmarsh is erecting an edifice of two hundred feet in length east of his house, on Fort Hill, as a Silk House, and Cocoonery. The plan of it is original, and promises the best results. The worms while feeding, are now laid out upon boards and benches, by those who rear them, covered with mulberry leaves, and when for health and cleanliness they are required to be moved, it all must be done separately.

Mr. Whitmarsh's building is intersected by alleys, and on each side tiers of sliding frames or drawers rise from the floor upward. These frames are covered with lattice work of twine. The top one is laid over with leaves upon which the worms feed. The second frame, about an inch and a half below, is covered with strong paper, or coarse cotton. All the stems of the leaves, or offal from the worm, fall from the lattice work above upon this draw, and when the usual time for cleaning them comes, instead of lifting each separately, it is only requisite to remove the lower drawer, and the cleansing is accomplished.

The leaf of the Chinese Mulberry, which Mr. W. will use, is so tender that the worm will devour it all. Sometimes they will fall from the

lattice work above, upon the paper drawer below. In that case, when a new supply of leaves is laid on above, the worms at once ascend, as the distance is not too great between them, to prevent their reaching above. This is a great and important change introduced into the method of feeding and cleanliness, saving time and promoting the health of the worms.

Another great improvement to be introduced by Mr. Whitmarsh, is the air given the worms in winding their cocoons. Now when the worms have terminated their feeding, easily known by their movements, branches of trees and bushes are laid over or suspended above them, and among which the process of winding is carried on. Consequently they are much entangled, lost to sight, a great deal of labor and silk lost in securing themselves, and altogether an awkward method of separating the cocoons for use, from the bushes.

He proposes, when the worms are ready to wind, to transfer them to upright frames, with twine lattice work, standing about an inch and a half apart.

The worms will reach over from one frame to the other, fasten themselves at each extremity and then in a small compass envelope themselves in their cocoons. Every thing then is clean and compact, and after they have finished winding, the frames in pairs can be put away compactly, and when wanted for use, the cocoons are easily taken off. The building is well contrived for ventilation and the reeling by steam power will be carried on in the same edifice. He intends to feed a million of worms this summer and reel four or five hundred pounds of silk.—*Northampton Courier*.

Francis H. Davidge, Esq., has been invited by the Maryland Horticultural Society to deliver the anniversary address, on the 28th instant, and has accepted the invitation. From the literary acquirements of Mr. D. and his fine discriminating taste, we have the best assurance that he will do ample justice to the task he has undertaken.

The official authorities of Ohio and Michigan, have unfortunately got into serious collision. An armed party of the territory of Michigan, after firing over the head of Col. Hawkins, the Ohio surveyor, made him and seven armed persons prisoners, and took them to Tecumseh for examination. The Ohio Commissioners being apprised of the capture of Col. Hawkins and his party, made good their retreat. The Governor of Ohio, is said to have a force of 500 men with him at Monroe, and to have issued orders to call out 10,000 men, to secure the running of the boundary line. The Free Press says, that this "*invasion*" will be repelled with the whole force of Michigan. Every *American* must, in the deepest recesses of his heart, deplore a state of things so disastrous to the cause of human liberty.

He who defers the hour of beginning to live correctly, is like the peasant who waits to have the river flow past; but it continues to flow, and will flow till the end of time.—*Horace*.

THE FARMER.

LIQUID MANURES.—In the preceding volume of this work, page 134, there is a very interesting article on the propriety of using liquid manures for purposes of horticulture: a solution of soot and water is therein recommended, in the proportion of six quarts of the former to a hogshead of the latter. This mixture has been found to exercise a most salutary influence on *Peas*, *Asparagus*, and a variety of other vegetables, to which it has been applied: we do not doubt the fact stated, and would here observe, that the *soap suds* made in a farmers' family, which is mostly thrown away, is one of the most effective manures that can be applied to vegetables and flowers of all kinds. From an experience of several years, we can testify to its invigorating effects, and recommend its use with confidence. There are but few families, anywise extensive, who do not make a sufficient quantity of this article, in the course of the year, to keep a garden of tolerable size, not only in good condition, but rich enough to secure good crops of vegetables.

WOOL GROWING, AND LARGE SALE.—A Claremont, N. H. paper says, that Dr. *Leonard Jarvis*, of that town recently sold 18,000 pounds of wool, all of his own raising—and received for the same about \$14,000. Such results are encouraging and calculated to induce those who own farms favorably located, to enter into the business; but the prudent farmer will, of course, make his calculations, and take a full view of the advantages and disadvantages, outlay of capital in sheep, expense of keeping them, per centum of mortality, and all the other drawbacks upon profit, before he ventures on a change.

COUCH GRASS.—A writer in the *Maine Farmer* recommends as the only practicable way of destroying this pest, to be this—plough below the roots, fork it out and give it to the hogs; and affirms, that it will grow readily when turned under eight or ten inches.

Another writer in the same paper says it may be destroyed in the following manner. After ploughing the ground infested with it sow it as early as possible with buckwheat. This springs up and prevents the couch grass from growing. About the last of June, when the buckwheat is in blossom, he ploughs it under, and sows another crop. This springs up and has time to ripen its seed before frost, and in the process the couch grass will be destroyed. Here then are two farmers at issue upon a plain matter of fact. Who is to decide?

RULES FOR MAKING BUTTER.—The editor of the *Maine Farmer*, gives the following brief directions on the subject of making butter, and they will probably be found on examination, to be infinitely preferable for all practical purposes, to a long essay. He says, what is strictly true, that the art of making butter is extremely simple, and may be reduced to a few rules. In the first place, keep every utensil clean and sweet. Then be careful to churn the cream before it is too old.—Churn it well, till the buttermilk is separated from the butter. Work out all the buttermilk, and then salt with good Turks Island or Rock Salt.—This he prefers to Liverpool salt, because, as he alleges, the latter is not so pure as the two former kinds, as it contains glauber salts, sulphate of magnesia, muriate of lime, and other impurities.

[From the N. E. Farmer.]

INDIAN CORN.

To the Editor of the N. E. Farmer.

SIR:—Having been often requested both by scientific and practical farmers, to publish my method of growing Indian Corn, I take the liberty to offer through your useful Journal, the *New England Farmer*, a few practical hints to young corn growers. The reader will readily perceive, that I am more used to handling the plough and hoe than the pen, consequently he will excuse me, if I should now and then make a *balk* with the latter. In this, I shall give the result of my experience, in raising corn on green sward so called.

I plough as late, or as near to planting in the spring as possible, so as to turn under as much growth of grass, as I possibly can, which will immediately ferment, and help to decompose the old fog and sward, which makes the best of food for the latter growth of the corn. I usually plough one day, and plant the next, in the following manner: I commence on the further side or longest way of the field; after ploughing one day or so, I cart on to the furrows, and drop in heaps, at the rate of about twenty ox cart loads of good compost manure to the acre; thirty-five bushels I call a load: dropped into six heaps the distance of the cart and oxen apart, each way, from centre to centre, will about do it. After dropping two rows of heaps, I spread the manure as even as possible, then harrow it over twice with a light harrow, then roll with a heavy roller, which I consider very important, as the harrow partially moves the manure with the soil, the roller levels the surface, and presses the manure into the soil, which prevents in a great measure its wasting, either by evaporation or the wind. I then furrow very shallow, calculating my rows three feet and a half from centre to centre; as sward land should always be worked lengthwise of the furrow, it is not necessary to furrow but one way, as all harrowing, ploughing, and hoeing the crop, should be done lengthwise, so as not to disturb the sod. If I have a plenty of manure, I then drop into the furrow in the hills, about eighteen inches apart, a small quantity of manure. In dropping the corn (a very nice operation) after leveling the manure with my foot, I strew from six to eight kernels lengthwise of the hill, in nearly a straight line, making the

hill about ten inches long. The advantage of having the corn in a line is, you can pass with the plough or cultivator, (the latter I consider much the best) near the corn without disturbing it, which I consider very important. At the first dressing, I pass twice in a row with the cultivator, taking care to shave close to the corn each time, then follow with the hoe, and chop around the corn, for the purpose of killing the weeds, and loosening the soil; taking care not to draw any earth up. At the second and third dressing, I pass with the cultivator or plough within about eight inches of the corn, and chop with the hoe as before, earthing up a very little, say about one inch each time; taking care to thin out the weakest plants, leaving from four to six in each hill. Immediately after the last dressing I sow about one pound of turnip seed to the acre. I will state some of the advantages of planting at the time of ploughing. You make clean work, (as the old saying is among farmers) by beginning on the further side of the field, all the carting of manure, and passing, will be on the grass, which is easier and better, than passing over ploughed land. Likewise at that season of the year, cattle is generally weaker than at any other time, therefore, ploughing one day, and planting the next, relieves them very much. Also by planting immediately after ploughing, the corn will get the start of the weeds, particularly if it has been soaked 24 hours in a weak solution of nitre, and then mixed with ashes, so as to separate freely before planting.

I plant the early twelve rowed kind, which I name the *Phinney corn*, having first obtained the seed from E. *Phinney*, Esq. a first rate farmer in the town of *Lexington*, which I consider the best I ever planted, although I presume I have planted twenty different kinds, that I have received from different parts of the country. The ears are long, the kernels well set, and the cob better filled out than any other kind I ever saw. Take two ears of equal lengths, one a twelve, the other eight rowed, the twelve rowed ear will contain nearly a third more shelled corn than the eight. The stalks are very small and short, particularly the tops; consequently the ground is not so much shaded, which is a great advantage to the turnip crop.

The practice of spreading the manure on the sod, before ploughing, I do not approve of. I give my reasons: in 1828 or 9, I planted a field of about four acres, in the way and manner I have described, except a strip or band about two rods wide through the middle of the field, on which I spread the same kind and quantity of manure before ploughing, that I did on the other; and the after management was the same as the rest of the field. You could see the difference in the corn, in every stage of its growth. Come to harvesting, the ears were not so large nor so well filled out. The next spring I sowed the field down in grass without disturbing the sod; the seed took well, and I had a fine crop for several years after. For two or three years after, the grass was smaller on the strip where the manure was ploughed in, after which you could not perceive much difference in the crop. The experiment led me to observe more particularly the difference between spreading manure on or near the surface, or burying it deep. I am aware that it is said by some, and some very good practical farmers, too, that you cannot bury

animal manure: that the gases will always rise to the surface, which I will admit they do in some measure; but the juices, the most important part, which way do they go? up or down? I say down; and a good ways down, in some soils. For instance, where a large heap of manure lies over winter in the field, after moving the same in the spring, if you take it up, and then manage the spot the same as other parts of the field, without ploughing or putting on any manure, you will have a large crop. On the other hand if you plough the spot deep, after moving the heap of manure, the crop will be small, comparatively speaking, unless you manure the same as you do other parts of the field.

Now, Mr. Editor, if any of your subscribers will try my method of raising Indian Corn, with a good kind of seed, on a tolerable good soil, and manage the whole process skilfully, in a good husbandlike manner, and the season should be as favorable as the last was, if he don't raise from 75 to 100 bushels of corn to the acre, and 200 bushels of turnips, besides pumpkins and beans if he plants them, I will tell him how to make compost and manage his field next season, so that he can cut his two tons of hay to the acre, for three or four years to come; which will more than pay him for the trouble of reading this and trying the experiment.

DANIEL CHANDLER.

B——, March 16th, 1835.

N. B. If you plant fallow ground, either spread the manure on the furrows, or harrow it in, or put the corn under the dung.

D. C.

SYSTEM IN HUSBANDRY.—There is perhaps no branch of human industry where so much depends on doing things at the proper time, as in that of agriculture, and hence the necessity of adopting and pursuing a system. With proper care and an inflexible purpose of leaving nothing to be done to-morrow, which should be done to-day, many of the heart burnings and disappointments which occur to mar the feelings of the farmer and planter, might be avoided. These reflections were elicited by reading the following brief and apposite advice in the *Genesee Farmer*:

“As a great number of things are always to be done on a farm, let every farmer carry in his pocket a paper and pencil, and as soon as any thing requiring early attention occurs to him, which cannot be done immediately, let him make a memorandum of it, and thus in a short time he will have a list of whatever is necessary to be done; and at any leisure moment, by consulting this list, he determines at once what next needs his attention most. It is a good practice also to write down every evening whatever is to be done next day, and at the end of every week what is to be done the next week. By pursuing this course, the farmer has the whole of his business at one view under his eye, and knows how to spend every hour to the best advantage; and he rarely finds any unexpected business to call him suddenly away from his present employment, and thus a great deal of time and vexation is saved, which would otherwise be wasted in being perpetually hurried from one kind of labor to another, leaving every thing but half finished in the bustle.”

THE GARDENER.

[From the *Ohio Farmer*.]

CULTURE OF THE CUCUMBER.

I will state a fact relative to the planting of cucumbers which came under my observation, and which is worthy of being known. I shall at least give a further trial myself of its reality; though I cannot conceive there is a doubt remaining on the subject. Last spring, a friend of mine, and myself were planting cucumbers at the same time.—I was planting mine, as is usual, in gardens, by mixing a small portion of stable manure with the earth, and raising the hill an inch or two above the surface of the ground. Observing it, he joyfully remarked, “Let me show you how to raise cucumbers!” Never having much luck in raising them, I cheerfully agreed to his proposition.—He commenced by making holes in the earth, at the distance intended for the hills, that would hold about a peck—he then filled them with dry leached ashes, covering the ashes with a very small quantity of earth. The seed were then planted on a level with the surface of the ground. I was willing to see the experiment tried, but had no expectation of any thing but a loss of seed, labor and soil. But imagine my astonishment, (notwithstanding a drier season never was known, and almost a universal failure of garden vegetables,) when I beheld vines remarkably thrifty, and as fine a crop of cucumbers as any one need wish to raise, and continued to bear for a very long time, unusually so in fact. I will not philosophise or moralize on this subject, but say to all, try it—and instead of throwing your ashes in a useless heap to stumble over, near your door, put it to its proper use and reap your “rich reward.”

Thoughts on flowers.—“Are not,” asked the author of *Atherton*, “flowers the tears of earth, and are not stars the flowers of heaven?” Flowers are the teachers of gentle thoughts, promoters of kindly emotion. One cannot look closely to the structure of a flower without loving it. They are emblems and manifestations of God's love for the creation, and they are the means and ministrations of man's love to his fellow creature; for they first awaken in the mind a sense of the beautiful and good. Light is beautiful and good; but on its undivided beauty, and on the glorious intensity of its full strength, man cannot gaze; he can comprehend it best when prismatically separated, and dispersed in the many colored beauty of flowers; and thus he reads the elements of beauty, the alphabet of visible gracefulness. The very inutility of flowers is their excellence and great beauty, for, by having a delightfulness in their very form and color, they lead us to thoughts of generosity and moral beauty, detached from, and superior to all selfishness, so that they are pretty lessons of Nature's book of instruction, teaching man that he liveth not by bread or for bread alone, that he hath another than an animal life.—(A chapter on flowers, in the *Amulet*.)

Accumulated wealth brings care, and a thirst for increasing riches. He who requires many luxuries, is always in want of many. Happy is he to whom God has given a sufficiency with a sparing hand.—*Horace*.

THE BREEDER & MANAGER.

[From the *Genesee Farmer*.]

TO DESTROY TICKS ON SHEEP.

Friend Tucker.—I have been a constant reader of thy valuable paper for more than two years during which time I have noticed several communications on the best method of destroying ticks on sheep, none of which seem to me so well adapted to the end designed as that which an experience of sixty years in farming, has led me to adopt, and which is now submitted to the public with much diffidence. I have had for several years a flock of sheep, about one hundred in number, composed of the Merino and Bakewell breeds, and when purchased by me the former were much afflicted by “the scab,” and all by ticks—the lambs the most severely. For the destruction of the ticks, I procured between one-half and three-fourths of a bushel of stems or refuse tobacco, which I boiled, and when the strength was sufficiently extracted the liquor was put into a half hoghead tub, as being the most suitable for the operation intended—to this was added water till the tub was nearly full. After the sheep were sheared, they were taken and immersed in this decoction, a board being placed across the tub in the meantime for the purpose of draining them on, thereby saving the liquor, which would otherwise be soon exhausted. In this operation the head of the sheep is to be exempt from immersion; and to be properly done, three persons are necessary, one to manage the head, and the others the feet. The lambs should undergo the same process, the decoction being previously diluted with water, and a little more care should be taken in draining them. A second operation will be necessary in about ten days after the first—this is indispensable to effect the object intended. The intervening time between the first and second immersion is necessary for the eggs of the old ones to hatch, and this young colony once destroyed, the cure is complete. It may be well to remark, in relation to this process, that its effect in the destruction of “the scab,” was equally as salutary and decisive as in the case of the ticks.

A PENNSYLVANIA FARMER.

Wood Lawn, 3d mo. 17, 1835.

BEEES.—Mr. *Levi H. Parrish*, of Brighton, Monroe county, New York, has, we learn from the *United States Gazette*, invented and procured a patent for a Bee Hive, which is so constructed that the little laborers may be made to contribute to the profit of their owners, many pounds each year, without diminishing their own comforts or interfering with their winter supplies. It may also be kept in dwelling houses, without endangering the people.

TIMBER.—The following are stated to be facts by the editor of the *New England Farmer*: that timber growing in open land, or on the borders of woods is best for all building purposes, that that which grows on dry land, having less sap than that which is grown in swamps or wet places, is more solid and, therefore, more durable; that the elm and beach last longer under water, and that the latter will hold a nail better in water than any other timber.

FOREIGN ABSTRACT.

We had prepared our abstract, when another arrival rendered what we had written of no avail, the news by the last being a week later. The whole, however, may be summed up in a few words. The British Ministry have been dissolved, in consequence of several successive defeats on the Irish Church bill—one of which was on motion of Lord John Russell, to appropriate the surplus Church property in Ireland to the general education of the poor. This motion was resisted on the ground, that it would be an unconstitutional interference with the chartered rights of the established Church.

The news from *France* relate almost exclusively to the debates in the Chambers, on the bill for the payment of the indemnities to America, which have been favorably reported on by the committee to whom it had been referred. The discussion was warm, the opposition speakers being chiefly Carlists; but it was supposed generally, that the bill would pass by a large majority. The question was to have been taken on the 2d of April, and the majority in its favor it was expected would reach between 70 and 80.

The Duke of Leuchtenberg, who a few months since married the Queen of Portugal, and assumed the title of Prince Augustus, died suddenly of the quinsey, on the 28th of March.

MARKETS.—*Sales at Havre*, April 6th.—336 bales of Louis'a Cotton, at 138a 160f; 100 Georgia at 140f..

7th. 1760 bales Louisiana cotton at 136f. 50 a 168f.; 39 Tennessee, at 139f; 790 Georgia, at 128a 145f.—Total 2675 bales.

8th.—2,509 bales Louisiana Cotton, at 138f a 155f.; 142 Mobile to arrive at 150f; 192 Virginia, at 142f a 50f; 139 Georgia, at 140.

[The sales show a brisk business, and prices appear advanced, though our materials do not enable us to say how much.]

Havre, April 9.—The sales in Cotton reported yesterday amount to upwards of 4000 bales to trade and speculators, without any improvements, but at very full rates. The transactions this day reach only about 900.

Liverpool Cotton Market, April 5th, was without change from the prices; the extreme of last week for American cannot be so readily obtained this; long staple is selling at very full rates; the Sea Island at auction to-day went off with spirit at $\frac{1}{2}$ d to 1d per lb advance. The import is 26,769 bags, and the sales are 12,460 bags, viz. 230 Sea Island, 19d to 2s 4d—70 Stained do 9d to 18d—3,650 New Orleans 9d to 12d—1490 Alabama, &c. 9d to 12. By auction 80 Sea Island 21d to 2s 4d.

STILL LATER.—Since the above was in type, another arrival brings advices up to the 11th April, from Liverpool, and 10th from London. The new Ministry had not yet been formed, though it was generally believed, that Lord Melbourne would be charged with the duty of forming one, as Earl Grey had a very long interview with the King, and immediately thereafter had communication with Lord M.

The Markets for Cotton had advanced $\frac{1}{4}$ d, on former prices, though most of the sales were to speculators.

MISCELLANEOUS.

WHY DO I LOVE?

Why do I love her?—I cannot well answer,
Except in a negative way;
It is not because she is famed a dancer,
And trips over the floor like a fay;
Nor is it because she warbles so sweetly,
While touching the tuneful guitar:
'Tis not that she dresses with taste and so neatly—
'Tis something more exquisite far.

Why do I love her?—'Tis not that her beauty
Is equalled alone by her worth;
'Tis not that in filial affection and duty
She has not her equal on earth;
Nor is it because she has genius and talents,
With all that the schools can instil,
A rich cultivated intellect, and fancy to balance—
'Tis something more exquisite still.

Why do I love her?—Because I have reason
To know that her heart is an urn,
Where purest affection, a stranger to treason,
Will warmly and brilliantly burn.
Because she will love with as fervent devotion
As glows in a seraph above;
Because she's alive to each tender emotion—
I love her because she can love.

A Mother's Three Holidays.—The interesting Cora in the tragedy of Pizarro, thus describes the three holidays, "allowed by nature's sanction, to a fond mother's heart:"

"When first the white blossoms of his teeth appear, breaking through the crimson buds that did encase them, that is a day of joy. Next, when from his father's arms he runs without support, and clings laughing and delighted to his mother's knees, that—that is the mother's next holiday; and sweeter still the third, whenever his little stammering tongue, shall utter the grateful sound of FATHER, MOTHER. O, that is the dearest joy of them all!"

A Wedding.—The bride turned a little pale, and then a little flushed, and at last had just the right quantity of bright, becoming color, and almost shed a tear, but not quite, for a smile came instead, and chased it away. The bridegroom was warned not to forget the ring, and all were assembled round the altar. "I will," was uttered in a clear, low voice, and the new name written --and Sophy Grey, was Sophy Grey no more; and she turned her bright face to be looked on, and loved and admired by the crowd of relations and friends surrounding her, and they thought that Sophy Stoketon was still dearer, and prettier than even Sophy Grey had been; and then the carriages were entered, and the house was reached. Sophy walked into her father's house, her childhood's home, her home no longer—and the bridal dress was changed, and the travelling dress took its place, and all crowded round her—her father, the mother, the sister, the brothers, all crowded around her to say good-by, to look and look on that dear face once more, to feel that her fate was sealed, to pray that it might be a happy one—to think that she was going away, away from home, away with a stranger! and tears and smiles were mingled, and fond looks, and long embraces, and a father's mingled tear of joy and sorrow was on her cheek, and the sister's tear, that vainly tried to be a smile, and the mother's sobs --and Sophy Grey left her father's house, left it with the bright beams of joy and hope upon her brow, and in another moment, the carriage door

was closed, the last good-by uttered--and Sophy was gone.

Oh! how melancholy! how lonely does the house appear, where but a moment before all had been interest and hurry! Who has not experienced the deserted sensation, when those we have been accustomed to see, are gone--when the agitation, the interest at parting, is over--the forlorn, empty look of the room--the work-box, the drawing materials, the music, all gone--or perhaps one single thing left to remind how all was --a flower, perhaps, that had been gathered and cast aside--the cover of a letter, which had been scribbled over in the forgetfulness of the happy conversation.

A neat Compliment.—One of the neatest compliments on record, is that paid by Lord Camden to Fox, that "his price was immortality, and he knew that posterity would pay it."

The Wife.—That woman deserves not a husband's generous love who will not greet him with smiles as he returns from the labors of the day; who will not try to chain him to his home by the sweet enchantment of a cheerful heart; for there is not one in a thousand that is so unfeeling as to withstand such an influence and break away from such a home.

[For the Farmer and Gardener.]

A PLEASANT BEVERAGE.

It is not, perhaps, generally known, that the green branches of the Burnett grass may be called into very agreeable use, in our summer beverages. Rince it in cold water immediately on gathering, then throw a handful into a bowl of Sangaree, concocted of red wine, or cherry bounce and water, duly qualified with loaf sugar, and it will be found to impart a peculiar freshness and delicious flavor.

The writer of this article, first met this delightful beverage, at the hospitable mansion, in Richmond in this state, of the late Capt. Singleton, of the revolutionary army, forty years ago, and has often since used it at his own house. J. M.

Virginia, 28th April, 1835.

A diamond weighing upwards of 5 dwts. [30 carots,] was lately found on the plantation of Mr. P. Brooks, in the county of Prince Edward, Va., by one of his children. It has been examined by the Professor of Chemistry, at Hamden, Sydney College, and several other gentlemen, all of whom pronounce it pure carbon. It is supposed to be worth \$15,000.

CONTENTS OF THIS NUMBER.

Silk Culture—The Editor's views in relation to introducing the Cultivation of the Mulberry, and the Culture of Silk into Alms-Houses, estimates of profits, &c.—Judge Spencer's letter on the same subject—Description of a Cocoonery—Notice of F. H. Davidge, Esquire—The Border Difficulties—The hour of beginning to live—Liquid Manures—Wool Growing—Couch Grass—Rules for Making Butter—Mr. Chandler's mode of raising Corn—System and its value in Husbandry—Culture of the Cucumber—The cares of Wealth—Recipe to destroy Ticks—New Bee Hive—Properties of Timber—Foreign Abstract—Why do I Love Her?—A Mother's Holidays—A Wedding—Lord Camden's Compliment to Fox—The duty of a Wife—A Pleasant Beverage—An American Diamond—Prices Current—Bank Note Table—Advertisements—Terms of the Paper.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,.....	bushel.	2 50	3 00
CATTLE, on the hoof,.....	100lbs.	6 50	7 50
Slaughtered,.....	"		
CORN, yellow,.....	bushel.	82	85
White,.....	"	80	85
COTTON, Virginia,.....	pound.	17½	18
North Carolina,.....	"		
Upland,.....	"	18½	19
FEATHERS,.....	pound.	35	37
FLAXSEED,.....	bushel.	1 50	1 90
FLOUR—Best white wheat family,.....	barrel.	7 50	8 00
Do. do. baker's,.....	"	7 00	7 50
Do. do. Superfine,.....	"	6 00	6 50
Super Howard street,.....	"	6 25	6 50
" wagon price,.....	"		
City Mills, extra,.....	"		
Do. do.	"	6 50	6 75
Susquehannah,.....	"	6 25	
Rye,.....	"	4 00	4 75
GRASS SEEDS, red Clover,.....	bushel.	5 00	5 25
Timothy (herds of the north).....	"	2 50	3 00
Orchard,.....	"	none	
Tall meadow Oat,.....	"	2 00	2 50
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.	18 00	20 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	8
Hogs, on the hoof,.....	100lb.	6 00	6 75
Slaughtered,.....	"		
Hops—first sort,.....	pound.	12	20
second,.....	"	10	
refuse,.....	"	8	
LIME,.....	bushel.	33	35
MUSTARD SEED, Domestic,.....	"	5 00	6 00
OATS,.....	"	36	45
PEAS, red eye,.....	bushel.		
Black eye,.....	"		1 50
Lady,.....	"		
PLASTER PARIS, in the stone,.....	ton.	3 25	3 31½
Ground,.....	barrel.	1 37	
PALMA CHRISTA BEAN,.....	bushel.	2 00	
RAGS,.....	pound.	3	4
RYE,.....	bushel.	90	95
Susquehannah,.....	"	90	95
TOBACCO, crop, common,.....	100 lbs	4 00	
" brown and red,.....	"	5 00	7 00
" fine red,.....	"	7 00	9 00
" wrappery, suitable.....	"		
" for segars,.....	"	6 00	12 00
" yellow and red,.....	"	8 00	12 00
" yellow,.....	"	9 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality,.....	"	4 00	5 00
" ground leaf,.....	"	5 00	9 00
Virginia,.....	"	5 00	10 00
Rappahannock,.....	"		
Kentucky,.....	"	6 00	9 00
WHEAT, white,.....	bushel.	1 30	1 40
Red,.....	"	1 20	1 30
WHISKEY, 1st pf. in bbls,.....	gallon.	scarce	38
" in hhds,.....	"		36
" wagon price,.....	"	31	32
WAGON FREIGHTS, to Pittsburgh,.....	100 lbs	1 50	
To Wheeling,.....	"	1 75	
WOOL, Prime & Saxon Fleeces,.....	pound.	62 to 75	26 to 28
Full Merino,.....	"	52	62 24 26
Three fourths Merino,.....	"	45	52 23 24
One half do.	"	40	45 23 24
Common & one fourth Meri.	"	35	40 22 24
Pulled,.....	"	35	38 23 26

FOR SALE,

A BROOD MARE about 15 hands high, color black, fine form and action. Apply at this office. May 5th.

Printed by Sands & Neilson, corner of Calvert and Market streets.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.		
BACON, hams, new,.....	pound.	11	11½
Shoulders,.....	"	8½	8½
Middlings,.....	"	10	
BUTTER, printed, in lbs. & half lbs.	"		37½
Roll,.....	"	28	31
CIDER,.....	barrel.		
CALVES, three to six weeks old,.....	each.		
Dry,.....	"	17 00	30 00
COWS, new milch,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 70	1 80
CHOP RYE,.....	"	1 75	1 87½
EGGS,.....	dozen.		12
FISH, Shad, fresh,.....	per 100	11 00	12 00
Herrings, salted, No. 1,.....	"	4 00	
Mackerel, No. 1,.....	"	7 25	
Cod, salted,.....	cwt.	3 00	3 25
LAMBS, alive,.....	each.	1 25	2 00
Slaughtered,.....	quart r	37	50
LARD,.....	pound.	9	10
ONIONS,.....	bushel.	75	100
POULTRY, Fowls,.....	dozen.		
Ducks,.....	"		
POTATOES, Irish,.....	bushel.	50	60
Sweet,.....	"	1 25	1 50
TURNIPS,.....	"		
VEAL, fore quarters,.....	pound.		
Hind do.	"		

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,.....	par	VIRGINIA.
Branch at Baltimore,.....	do	Farmers Bank of Virginia, ½a
Other Branches,.....	do	Bank of Virginia,.....do
MARYLAND.		Branch at Fredericksburg do
Banks in Baltimore,.....	par	Petersburg,.....do
Hagerstown,.....	½a	Norfolk,.....do
Frederick,.....	do	Winchester,.....do
Westminster,.....	do	Lynchburg,.....do
Farmers' Bank of Mary'd, do		Danville,.....do
Do. payable at Easton,.....	do	Bank of the Valley,.....do
Salisbury,.....	uncertain	Branch at Romney,.....do
Cumberland,.....	½a	Do. Charlestown,.....do
Millington,.....	do	Do. Leesburg,.....do
DISTRICT.		Wheeling Banks,.....do
Washington,.....		Ohio Banks, generally 3a½
Georgetown,.....	½a	New Jersey Banks gen. 1½a2
Alexandria,.....	½a	New York City,.....½a
PENNSYLVANIA.		New York State,.....2½a3
Philadelphia,.....	½a	Massachusetts,.....2a2½
Chambersburg,.....	½a	Connecticut,.....2a2½
Gettysburg,.....	do	New Hampshire,.....2a2½
Pittsburg,.....	1½a2	Maine,.....2a2½
York,.....	½a	Rhode Island,.....2a2½
Other Pennsylvania Bks. 1½a2		North Carolina,.....3a4
Delaware [under \$5].....3a4		South Carolina,.....2½a3
Do. [over 5].....½a1		Georgia,.....4½a5
Michigan Banks,.....5a		New Orleans,.....do
Canadian do.....5a		

ADVERTISEMENTS

BUFFALO BERRY TREE.

SINCE it was ascertained that this tree is dioecious (the male and female being distinct trees) we have hesitated to send it when ordered, because our trees are too young yet for their sex to be developed. Under these circumstances we propose to furnish single trees (the sex being unknown) on the following terms:—Trees less than two feet in height at 50 cents each, and those above two feet at 75 cents a piece. When their sex shall have been ascertained we will furnish either male or female trees at \$1.25 each, and at \$2 per pair. By this arrangement time may be gained by taking young trees this spring and putting them out, relying on the future for mates for them, and nothing can be lost in point of price of them. We have a few from 1½ to 3 feet high, which we will put up to order on the terms above stated.

March 31, 1835.

SINCLAIR & MOORE.

HORSE MILLS—CORN CULTIVATORS, &c.

THE Subscribers offer for sale, at the MARYLAND AGRICULTURAL REPOSITORY, Light, near Pratt street, MILLS FOR GRINDING CORN AND OTHER GRAIN. They grind expeditiously, and make first rate meal. Specimens of which may be seen at their Establishment, together with the MILLS. These MILLS will be found very advantageous to farmers and planters generally, and to gentlemen owning large estates, who are in the habit of sending their grain to Mill at a distance; they would be of almost incalculable value, in the great saving of the time of a hand and cart and horse; and the Subscribers believe, that these MILLS would thus save their cost in a year, besides the great comfort and convenience of always being able to convert the grain on the place into flour, at pleasure—besides it would afford those who have large stocks, an opportunity to feed them with ground meal, and thus economise from twenty to thirty per cent. of the quantity usually consumed when fed on the grain whole.

Corn Cultivators of different patterns, both wrought and cast tires.

300 Grain Cradles, made of superior white ash wood, part of which has the natural turn, with warranted Scythes attached.

106 dozen wooden rakes.

Waldron and American Grass Scythes, by the dozen or on retail—also ready hung for use.

30 dozen Scythe Sneads.

25 boxes Scythe Stones.

Improved Wheat Fans, together with a general assortment of other Agricultural Implements.

SINCLAIR & MOORE.

BALTIMORE, May 12th.

TRIFOLIUM INCARNATUM, OR SCARLET CLOVER.

Just received a few casks of this valuable grass seed, lately introduced into this country from Germany, where it produces two good crops in one year. From its early growth in Spring, when other articles for feeding stock are so difficult to be procured, it is likely to become a valuable acquisition to American Husbandry. It blooms and is fit to cut in 50 days after sowing, and is not so coarse as the common Red clover, better furnished with leaves, and not liable to lodge or loose its leaves in drying. From its rapid growth it is of great value for an early crop, for soiling in summer, or for supplying food when other grasses are winter killed.

Also in store, St. Foin or Espersett, well suited for high dry soils, improving poor land, &c.

Burnet Grass, similar in character to the St. Foin, being well adapted to high, poor, dry soils.

Spring and Winter Vetches or Tares, Lucerne, Ray Grass, Feather grass, and many other rare, and common Field Seeds.

Twin Corn, producing from 4 to 8 ears on each stock. Garden Seeds, a general assortment.

ROBT. SINCLAIR, Jr.

April 14. at Sinclair & Moore's Md. Ag. Rep.

TERMS OF THIS PAPER.

1. Price five dollars per annum, payable in advance. When this is done, 50 cents worth of any kind of seeds on hand will be delivered or sent to the order of the subscriber with his receipt.

2. The manner of payment which is preferable to any other for distant subscribers, is by check or draft on some responsible party here, or else by remittance of a current bank note; and to obviate all objection to mail transmission, the conductors assume the risk.

3. Subscriptions are always charged BY THE YEAR, and never for a shorter term. When once sent to a subscriber the paper will not be discontinued (except at the discretion of the publishers) without a special order, on receipt of which, a discontinuance will be entered, to take effect at the END of the current year of subscription.

4. Subscribers may receive the work by mail either in weekly numbers, or in monthly or quarterly portions; or else in a volume (ending in May annually), handsomely pressed, half bound and lettered (to match with the American Farmer) by such conveyance as they may direct: but the \$5 must in all these cases be paid in advance.

ADVERTISEMENTS relating to any of the subjects of this paper will be inserted once at one dollar per square, or at that rate for more than a square, and at half that rate for each repetition.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 3.

BALTIMORE, MD. MAY 19, 1835.

Vol. II

THIS publication is the successor of the late
AMERICAN FARMER.

and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, MAY 19, 1835.

TO A CORRESPONDENT.

The communication of "Farmer" is received, and in reply to his polite inquiries, we have to observe, that they will all be fully and we hope satisfactorily answered, in a Manual which we are preparing upon the interesting subject to which he alludes. We feel indebted to him for his suggestions, and will endeavour to profit by them.

We are compiling a *Silk Manual* from the best and most authentic sources, on the culture of the Mulberry and the treatment of the Silk Worm, and shall, with all possible despatch, transfer it to our pages. The culture of silk, if we do not mistake the indications of the times, is destined to become a highly important and popular branch of husbandry, and hence it is that we feel it our duty to throw all the lights upon the subject within our reach before our readers.

We shall prefix to our manual an Engraving by that excellent artist, *Horton*, representing the worm in its various ages, which will add much to its interest, and we trust prove useful to the agricultural community.

RUFFIN'S ESSAY ON CALCAREOUS MANURES.

The present number contains an advertisement by its author, of *Ruffin's Essay on Calcareous Manures*—a work of genuine merit, which should be in the hands of every landholder, and especially of such as live in the *Marl regions* of our country. The author is eminently distinguished for his scientific attainments and ardent devotion to those departments of science that belong to the walks of husbandry. Gentlemen owning estates on rivers where beds of this valuable manure are likely to exist, should not be without it, as from the light which it sheds on the subject of indications, and the application of tests, it would enable almost any intelligent individual to discover any deposits which might be on his land.

VALUABLE SUGGESTIONS.—We transfer the subjoined to our columns from the United States Gazette. The advice is highly judicious, and we sincerely hope may be acted upon by the agricultural community throughout the country:

"If it is true, as is reported, that the winter grain has been greatly injured by the excessive cold of January, would it not be well for the farmers to attempt a larger crop of indian corn, potatoes, and other esculents, than they have usually tried? The demand is generally such as to pay well for the labor of cultivation, and in the supposed circumstances, they would be most profitable.

At the present moment, hay is very scarce and proportionably high, and oats have attained a price that is alarming for those who have a few horses with good appetites, and a horse without an appetite, is a bad affair."

POTATOES AND BUTTER.—We perceive by the papers of those places that Potatoes are selling at Cincinnati at from \$1 to \$1 12½ cts. per bushel, and at Louisville, Ky. for \$1 50 per bushel. At the latter place, butter brings 50 cents per pound. Such prices are truly encouraging, and would justify farmers in making efforts to secure supplies of both articles.

DAIRY SECRET.—Have ready two pans in boiling water, and on the milk's coming to the dairy, take the hot pans out of the water, put the milk into one of them, and cover it with the other. This will occasion great augmentation in the thickness and quality of the cream.

KNITTING MACHINE.—In a late number of the New England Farmer, there is a description given of a machine then exhibiting at the Agricultural Warehouse, Boston. It is represented as a small, neat machine, by which persons in indigent circumstances, and children, may be employed to great advantage. It occupies about a cubic foot, and is operated upon by a turning crank, which requires no more power or skill than a common hand organ, except when necessary to widen or narrow, when a stitch is dropped or added by hand. The machine does the work of six expert knitters, is very simple, and the work is done with astonishing rapidity and precision. It is said to be superior to the stocking loom, and can be worked by any intelligent child after a few minutes in-

struction. It is capable of knitting wool, cotton, silk or linen.

THE MERCHANTS' BANK OF BALTIMORE.—The subscription books to this institution, were closed on Tuesday last, and on counting the number of shares taken, it was found to amount to 364,133. This number is exclusive of the subscriptions for stock in the several counties of this state, which are supposed to have been liberal. It is estimated that forty millions of stock have been subscribed for, and the capital of the bank being but two millions, the subscription is supposed to have been twenty to one. The amount paid in, in this city alone, during the ten days the books were open, amount to \$3,644,330.

THE SUSQUEHANNAH CANAL.—This great work is, we perceive by the notice of the Commissioners, about to be taken up in earnest. Books of subscription to the stock of the company are to be opened on the 16th of June, proximo, in the cities of Philadelphia, Baltimore and Lancaster, and we think it is but reasonable to predict that the stock will all be promptly taken. We have called it a great work, and it is emphatically so, in the broadest and most comprehensive sense of the term. For although its length will be but about 27 miles, being intended to extend the Pennsylvania Canal to tide from Columbia, yet it is the remaining link in the great chain which will connect the waters of the Atlantic with those of the Ohio, Mississippi, Missouri and their countless tributaries,—thus bringing into proximity those who inhabit the far, far west, and south-west, with their brethren on our entire Atlantic coast—and opening a continuous water communication between the latter and a large portion of the rich and fertile valleys of the Susquehanna and Mississippi; so that when the Sandy and Beaver Canal shall have been completed, the most northern, eastern, and southern ports, will also be accessible to the trade of the country of the lakes. It may then indeed be called a work of immeasurable magnitude; for it will give such an irresistible impetus to business—such an enhanced value to property—and, so stimulate and warm into life the spirit of generous enterprise and lofty adventure, that the present will be marked as the era of improvement.

THE FARMER.

ROOT CROPS—There is, perhaps, no branch of husbandry so much neglected as that of root and other vegetable crops, and none whose loss is more severely felt. Ask a farmer who may have omitted raising a crop of potatoes, why he did so, and he will tell you it would have taken more manure than he could well spare. Now by many persons this reason would be taken as conclusive. But is it a good one? We ask the question, because we doubt its sufficiency; and if not sufficient, it is of no value whatever, inasmuch as it offers no excuse for an omission, which in its consequences is productive of great discomfort in a farmer's family throughout the whole winter, despoils his stock of their fair proportions of green food, the dairy of its flowing milk pans,—and, not unfrequently, visits its inflictions even upon the breakfast and tea-table of my lady hostess, who is sometimes compelled to sip her Imperial or Mocha without cream, and to digest her hot rolls without that most grateful of all the enjoyments of the breakfast table—sweet, rich butter—things which we all associate, in their greatest perfection, with rural life; but which are too often not to be found there even among good livers during part of the winter.

Believing that this inconvenience and discomfort could be remedied by a proper exertion on the part of most farmers—and being firmly convinced that there are but few farms, indeed, which do not possess ample resources for manuring the few acres requisite for raising root crops, we have always been surprised to find many, otherwise industrious and provident farmers, wholly indifferent to this most essential department of husbandry; and we maintain that no system can be good, which does not look to the providing of roots and other vegetables, not only for the table and for market, but for the milch cows and hogs, through that period of the year when vegetation is suspended by the frost. Ten or twenty acres judiciously managed in such culture, would make a full house, and a comfortable barn yard, throughout the bleak and pinching long days of winter, and fill many an udder, which otherwise would be lank, and lean and shrivelled, with a generous supply of that bland, though animating liquor, which is alike grateful to the palate, promotive of comfort, and conducive to domestic enjoyment.

On a well regulated farm, no one should, or indeed can be idle. Every one from the oldest to the youngest, must and should be doing something, and there is employment enough for all.

If the question should be asked, where the manure is to be obtained from, that can be spared

from the *main crops*, for roots and other vegetables? We answer—gather the leaves, and the accumulations of soil from vegetable decomposition, from your woods—the scrapings from your ditches—road sides and lanes—gather the grass and weeds from your gardens, and fence corners—haul them into your barn yard—form a compost of them, and you will have ample manure to answer all those purposes to which we would especially call your attention. The greatest difficulty is in making a beginning—of commencing the work of husbanding such manure, as we have pointed out—or, in other words,—the fault lies in this,—the proneness of man to magnifying any labor which he may be required to perform, that he has not been accustomed to. The most noxious weeds and unsightly plants, which infest our fields, lanes, and fence corners, may all be converted into fruitful sources of wealth—may all be made to pay a generous contribution to the husbandman, if he but so wills it. And much of this work may be performed by children, who are too young for more laborious occupations. Four or five of whom, in a few days, would gather as many weeds and leaves, as would manure an acre of potatoes in the drills, and thus secure a good crop. We therefore hope, that some of our subscribers will experiment upon our suggestions, and give an account of the result in the fall.

CULTURE OF INDIAN CORN.

There is no crop which habit has rendered more indispensable to the wants of our families and our farms than this. The late John Taylor, of Virginia, termed it our “meat, meal and manure.” Holding this high rank in our farm economy, it is a subject of moment to adopt the best mode of culture. As many districts are shy in producing wheat, and as this crop is seriously threatened by the new (to us) wheat insect, it becomes more a matter of solicitude to render our corn crops productive. But as this grain demands more labor in its culture than other grain crops, so it is more important, on the score of profit, that it should be well managed; for if thirty bushels an acre, be considered only a remuneration for the labor bestowed on the crop—all that the product falls short of this must be a loss—and all that it exceeds, a net gain to the cultivator. The first consideration in regard to the corn crop, is to give it a dry mellow soil; the second, that this soil be rich, fat or fertile; and the third, that the seed be timely put in and the crop well taken care of. Neither wet grounds, nor stiff clays, nor poor grounds, will repay, by their product, the labor required on a crop of corn. He who has no other lands but these, had better bestow his labor upon other objects, and buy his corn. We think the best preparation for corn is a clover lay, well covered with long manure from the barn-yard, well ploughed, and well harrowed. It is better to give sixty loads of dung to three acres than to ten, upon the ordinary lands of our neighborhood. The difference in

product will not make up for the difference in labor. Corn can hardly be dunged too high.—What we have to recommend, that is not common in the culture of this crop, is—that double the usual quantity of seed be applied—the number of plants to be reduced at the weeding—in order to ensure three or four stalks in each hill;—that the roots be not broken, nor the manure thrown to the surface, by the plough, but that the harrow and cultivator be substituted for it, which will sufficiently mellow the surface and destroy weeds; and that the hills be but lightly earthed. By ploughing and hilling we conceive the manure is wasted, the roots broken and bruised, and limited in their rage for food, the crop more exposed to injury from drought, and the labor increased.

If the fodder which the stalks and shucks afford is an object to the farmer, as these certainly will be when their advantages are appreciated, the securing these in good condition is a matter of importance. To effect this, as well as to secure the crop from the effects of early autumnal frosts, we recommend the practice we have long and satisfactorily followed, of cutting the crop at the ground as soon as the corn is glazed, or the surface of the kernels has become hard, and of immediately setting it up in stocks to ripen and cure. This we have always been enabled to do early in September, and once in the last week in August. The quality of the grain is not impaired, nor the quality in our opinion, diminished, by this mode of management, while the fodder is greatly increased, and its quality much improved.

Genesee Farmer.

From the Tennessee Farmer. PUMPKINS.

As this article may be advantageously used in the feeding of stock, so as to admit of a great saving of grain, and as the season for planting is approaching, we would recommend to farmers the following plan of raising them, which we have found by experience, to possess many advantages over the one generally practised, that of sprinkling the seed over the whole field of corn, planted in the ordinary way.

Select a sufficient portion of the corn field, from which the Pumpkins can be most conveniently hauled and well adapted to their growth.—List it off as the rest of the field, not less however than four feet between the furrows, in every other row plant corn double as thick as it would have stood, had it been planted in every row—in the intermediate rows, plant pumpkin seed at from four to eight feet distance between the hills, the rows of corn will then be at least eight feet apart, and a row of Pumpkins between every two. The corn will produce nearly as much as if it had been planted in every row at the usual distance, and the crop of Pumpkins will be nearly as great as if there had been no corn planted with them, and far more than double what it would have been, if corn had been planted in every row. But besides this increase of product the saving of labor in gathering them will be immense. The Pumpkins can easily be collected in piles on the edge of the row, the waggon can pass between every two rows of corn, so as not to injure them, and the product of Pumpkins are far more valuable as food for stock if they be used in conjunction with hay and grain than when fed alone, and the ani-

imals should be well salted. In feeding them care should be taken not to permit hogs to have access to a large quantity of the feed, as they will eat so many as to kill themselves. If the land be poor, a good shovel full of well rotted manure placed in each hill of pumpkin will cause it to produce a large crop.

[From the New York Farmer.]

PREVENTIVE OF THE TURNIP FLY, OR BUG.

As the season is at hand for sowing early cabbages, radishes and turnips, which are so liable to be destroyed by the same insects known by the name of the turnip flea, fly, or bug, I take the liberty to send you, for the Magazine, what I have found an effectual preventive of the ravages of this little destroyer—it is very simple and within the reach of any one, being neither more or less than covering the drills or beds with millinett boxes, the same as in use for covering melon and cucumber hills.

My garden is so overrun by these insects, that often three sowings of cabbages have been destroyed in one season, and if a few escaped or survived, they were so mutilated as to prove of little use. Ashes, plaster, and lime, had been tried without effect, and finally the hot-bed was trusted to as the only sure resource.

On 12th and 14th April, 1834, early cabbages and radishes were sown in drills in ground newly dug, and covered immediately by these millinett boxes, of which I have about sixty, but used only ten or twelve for this purpose, together with four hand glasses or boxes used for raising early melons and cucumbers—these boxes are like hot-bed frames in miniature, and contain four small panes of glass each. The plants came up and prospered equally well in each, or if there was any advantage, it was with those under the millinett. No flea or bug was seen, and the boxes were kept on until the plants were thinned, and the leaf so far advanced as to be out of the power of the insect. On the 5th of May, winter cabbages, savoy, and cape brocoli, were sown, and treated in the same way, and with equal success. In both cases the bug did attack the plants after the covers were removed, but without any injurious effect. In the last case no hand glasses were used, and only ten millinett boxes, twelve inches square each, under which twice as many plants were raised as were wanted here, though no account of the number was kept.

This simple method may probably be insufficient for market gardeners, who would have a great extent of beds or drills to cover, but is amply sufficient for farmers, or others who raise for their own use, and not for sale. The boxes used for the early sowing are off in time for covering the melon and cucumber hills.

Though this experiment is that of only a single season, yet its nature is such as to leave little doubt of its general and permanent success.

Yours, &c., SENEX.

[From the New England Farmer.]

MR. CHANDLER ON CULTIVATING CORN.

MR. EDITOR—In answer to Mr. Hamlin's queries on the culture of Indian corn, in your last paper, and agreeably to his request, I will state that for fifteen years before the last, I was located near the city of Boston, say about twelve miles; of

course the climate is about the same as in or about the city. The farm that I cultivated contained a variety of soils, as most farms do in that vicinity. What I call a sandy loam, on a substratum of gravel, I consider best for corn, although most soils that will grow timothy and clover will grow corn.

The period that land should lie in sward, depends upon circumstances; such as the crop of grass and feed it produces, rotation of crops to be pursued, &c. Generally speaking, I should say from four to five years is the proper time; I plough as deep as the nature of the soil will admit. I prefer deep ploughing say from six to eight inches, and furrowed light, so as not to disturb the sod.

The depth and time of planting depends much on the backwardness of the season, state of the ground, &c. If I do not put manure into the hills I either mark the furrows with chains attached to a pole, or a similar machine; or furrow light with a horse plough, three and a half feet apart, in that case I cover the corn about one and a half inches deep with fine earth. If I put manure in the hill I spread the manure with my foot so as to have the corn come as near the earth as possible, then cover all the manure and corn completely over; say about two inches deep. I prefer planting about the middle of May, if the season will admit.

As to the time of dressing, that likewise depends upon circumstances. If the field should be weedy or grassy, as is often the case, I dress as soon as I can see the corn in rows, say three inches high; and never plough or hoe after the tassels or flower spikes show themselves. As it regards topping or cutting stalks, relative to the effect it has upon the crop of grain, and the comparative value between the stalks, when cut green or left on until harvesting, I think I shall offer some remarks hereafter, I will merely state in this, that the result of frequent experiments, has completely satisfied me that it is decidedly best to cut them.

As to earthing up, or raising the earth round the corn, it is my opinion rather a damage than otherwise, as the nature of the roots, and the direction they take, does not require it. I merely draw up a small quantity, for the purpose of covering the small weeds, that grow so near the corn, that you cannot cut or remove them with the hoe. Coarse barn manure, I generally use for plant potatoes, or making compost for corn or other crops. Hog manure, I work into compost for putting in the hill for corn and vines.

The "Phinney corn" is the earliest and best variety of field corn, that I am acquainted with.

In regard to the kind of turnip seed, I prefer the white flat, yellow stone, and Aberdeen; the two latter keep the longest, the former produces the most. I generally sow after passing with the cultivator, and before the last hoeing, which sufficiently covers the seed. The first rain that falls will completely cover all the hoe leaves.

If Mr. Hamlin should procure the true "Phinney corn," he will be puzzled, when he come to harvesting, to find many ears that contain less than twelve rows; if at all, it will be on a stock that contains a twelve rowed ear.

T. CHANDLER.

Thompson Island, April 12, 1835.

THE WHEAT CROP.—The following extract from a Wheeling paper presents a sadly true picture. For four successive years the crops of the Valley have failed, and the present prospect is gloomy. Money has become an invisible article—men of property are as much in want of "the one thing needful" as their poorer neighbors, and the pressure is broad and general.—The motto of the Livingston family—"spero meliora"—is all the consolation that can be offered to the citizens of the Valley.—*Winchester Republican*.

Staunton is at the head of the great lime-stone valley of the Shenandoah, one of the finest wheat regions in the state, if not in the United States. But that valley, or at least the lower and most fertile part of it, has been scourged with drought for four years past,—very little more than half the usual amount of rain having fallen each year during that period. The consequence is, general pecuniary embarrassment and much actual bankruptcy. We have a letter from Frederick county, 100 miles below Staunton, written on the 21st, April, which states that the wheat had been frozen out during the winter, and that the next crop must be very light. Another letter states that a great disposition prevails to leave the county and move to the west, and that half the county might now be purchased. Another letter from Berkeley county below Frederick, says that more suits have been brought this spring in Berkeley and Jefferson, than were ever before known at any one term. All this suffering arises from the drought before spoken of.

WASHINGTON'S OPINION OF AGRICULTURE.—

The subjoined paragraph contains the opinion of the great and good man, whose name is appended to it, upon the affairs of agriculture. It breathes a spirit no less truly elevated in moral thought, than it is unambitious of what the world too often mistake for distinction. A volume of the most studied eulogium, upon the pursuits of husbandry, could not have said more in their praise, than is uttered in the few lines which follow. And the opinion of Washington is the more valuable, as it was given by one, the tenor of whose whole life, is at once the guaranty and the bond of its sincerity:

"The more I am acquainted with agricultural affairs, the better I am pleased with them; inasmuch that I can no where find so great satisfaction as in those innocent and useful pursuits. In indulging these feelings, I am led to reflect how much more delightful to the undebauched mind is the task of making improvements on the earth, than all the vain-glory which can be acquired from ravaging it by the most uninterrupted career of conquest."—*Washington*.

How to preserve Potatoes.—The following simple method of preserving potatoes has been discovered by accident. A person at Annaberg had a quantity of charcoal in his cellar, which he removed for the purpose of depositing a large heap of potatoes in its place, but omitted to sweep up the dust at the bottom. At the end of the spring, when they generally begin to sprout, he found that not one of these potatoes had germinated, and that on being dressed, they retained all their original flavor.

THE BREEDER & MANAGER.

ON WORKING OXEN.

We copy the following remarks on working oxen from the Memoirs of the Pennsylvania Agricultural Society, contained in a letter from the Hon. Levi Lincoln to John Hare Powell, Esq.:

"The best broken oxen are those which are early trained and accustomed to the yoke with occasional light work. They are often broken as early as at one or two years of age, with gentle and patient usage. At this period they are more docile and tractable, and it is thought become more powerful, by being sooner accustomed to each other, and to the application of their strength to the draft. I believe they may be taught to travel in almost any gait; certain it is, the rate at which oxen differently broken, will walk with their load, would seem incredible to a person ignorant of the difference in the mode of their training. To accustom them to a quick pace, they should at first be driven in the yoke while young, without any, or a very light weight, and never heavily loaded, until they have arrived at full strength and maturity.

"A great fault with many people is too much indifference to the construction of the yoke. Almost any shapeless piece of wood, with holes for the insertion of the bows, is made to answer; but to the ease of the draft, the adaptation of the yoke or bow to the neck of the bullock, and the position of the staple and ring in the yoke, are altogether material. For common use, and particularly for ploughing, I have found that yokes were generally too short. Cattle of the largest size, require a yoke from 4½ to 5 feet in length. In short yokes they are apt to *haul* as it is termed—that is, draw from each other, and to such a degree in some instances, as to cross their fore-legs, and destroy their power and greatly impede their progress. I once owned a pair made totally useless by this habit, and afterwards entirely corrected by the application of a yoke 18 inches longer.—A short yoke is necessary only in snow paths, where cattle would otherwise crowd against each other, the opposite of *hauling*, but of the same mischievous effect.

"In respect to what oxen may be made to do in a short time, or as an experiment upon their strength, I must refer you to the results of our ploughing matches. With us they are but little used upon the road, except in the transportation of heavy loads for short distances in the same town, or between neighboring towns. One reason why horses are preferred for waggoning on the road, may be that they can be made to travel quicker, and that from the construction of the hoof, they are less liable to lameness, than the cloven-footed ox, by becoming foot-sore. On the other hand, the patient and steady labor of the ox, finds no substitute in the horse for the service of the farm; and the latter is seldom seen there except in occasional aid of the ox team, or with the light plough between the rows of corn. The value of a yoke of oxen, or a pair of horses, for use in all the business of a farm, admits of no comparison. So decided is the preference for the former, that I do not believe a single farmer can be found in this extensive agricultural county who performs his labor by horses without oxen; while

there are *hundreds*, I had almost said *thousands*, who make no other use of horses in husbandry, than to furrow for planting, and plough among their corn for hoeing.

"Our oxen are kept in a cheaper and less expensive manner than horses. In the summer they are uniformly grazed in the pastures. In the cold and winter seasons they are put into the barns, and fed upon the *stock* hay, as it is called, that which grows in meadows, and upon the fodder of corn stalks, husks, &c. unless indeed they are more severely worked than usual, when hay of better quality is given them; and in all cases, as the spring advances, their keeping is improved, and with better hay, some grain is added. I speak of the general practice of farmers. There are some who keep their oxen more *generously*, and others more *hardly* than I have mentioned. But with a clean and warm stable, with *daily application of the curry-comb and card*, and coarse food, without *severe* labor, the best farmers will at all times exhibit teams of most vigorous and powerful cattle, and their best hay and their grain will be saved in their beef and pork, and in the produce of their dairies, for the market."

[From the Tennessee Farmer.]

MULES, vs. HORSES.

Mr. Editor.—Can any of your subscribers give a satisfactory reason, why the farmers of Tennessee, still continue to breed the common scrub horse in preference to the mule? Some of them surely can, or they would not still follow a practice, which they know to be unprofitable, though I acknowledge, I am unable to give any, unless it be an ungrounded prejudice, imbibed merely from the appearance of the animal: I think, they can have no other objection, as the mule is decidedly preferable to the horse, in almost every respect.

It is true, the size of the mule prevents his drawing as heavy a draft as the larger horse; but a team of good sized mules, will draw any load that is usually drawn about our farms in Tennessee; and for the plough or harrow, they are equal if not superior to the horse. They are sufficiently strong, to plough any of our lands, and are less apt to become frightened and run with the plough than the horse. And another, and great advantage is, the great age to which they attain; together with their being so little liable to disease. The generality of mules with common usage, will live and be serviceable, until they are from thirty, to fifty years of age. Whereas a horse, if he arrives to the age of fifteen, (which is not the case of one in ten,) is seldom fit for service after that age. I think these advantages are sufficient to induce the farmer to breed them for his own use, if he raises none for market. But if, as is the case in East Tennessee, where the farmer depends in a great measure, on the stock he raises for market, to bring him money, he would raise mules, instead of horses, he would find his profits almost double what they now are. In the first place the cost of raising a mule, is not more than half that of raising a horse, for he can sell his mule, at 2 and a half years old, for as much as he ever can; and his horse will not bring a fair price, until he is from four and a half, to five years old. And even when he has arrived at that age, the common scrub horse will not bring the farmer more than from 40 to 60 dollars; whereas the mule, at the age a-

bove stated, if of the ordinary size, say from 13 to 14 hands high, will bring him, from 75 to 100 dollars. And those of the largest size, will bring from 100 to 150; and some of them even 200 dollars, especially if they can be matched. Every farmer who has ever raised horses, knows what a loss he sustains in the death of his colts which are so very subject to diseases of different kinds, viz: distempers, cholera, &c: diseases which the mule is almost a stranger to. When such inducements as these are held out to our farmers, is it not strange that they still continue in the same old practice?

They cannot, I think, plead ignorance of that knowledge, as our brethren, the Kentuckians, are every year driving large droves of mules through our State, to the South, and returning with thousands of dollars to reward the farmer and the drover. Compare this state of things with our own, look at our horse drivers for the last 15 years.—Those who first began, or a large majority of them, are either insolvent, or what is worse, are living, God knows where, upon the money they promised the farmer for his horses. And those who still follow the business, will tell you, that they are worth less money now, than when they began.

If any of your numerous subscribers can give any good reason for this state of things, they will receive the thanks of

Your friend,

A YOUNG FARMER.

Washington county, Ten. }
March, 1835. }

ON HOVEN CATTLE—CURE.

We deem the following remarks, contained in a private letter from our respected correspondent, DANIEL LONGSTRETH of Pennsylvania,—of great value; and we hasten to lay them before our readers. If farmers would give us more of their experience in all such matters, the public would be greatly benefitted: and we should feel very thankful for the favor whenever our columns were made the vehicle of communication.

Cattle which are *badly hoven*, can be saved only by the most expeditious and energetic measures. The delay of a few minutes is often fatal, and I would respectfully ask is there any plan more quick and certain than stabbing? It is to be done in the *left side* below the short ribs, and between the hip bone and last long rib. In five or six cases, I have never once failed in this operation.

"I have tried awls and penknives, but of all instruments I prefer a good sized butcher knife, and I have usually made the orifice or gash at least two inches in length: the gas escaped with a rushing sound like steam. After relief is fully obtained, I commonly stick on a good plaster of shoemaker's wax; and have never perceived any injurious effect from the wound.

"There is as I conceive not the least possible danger from the veriest tyro's applying the knife without hesitation, if it only be done within the above limits on the *left side*. In one instance the beast was so swelled that I could not see the hipbone, and stabbed close along side of it. At another time the orifice was made close to the last long rib; and in a third case it was done between the short ribs very near the back bone;—still the

animals always did well. One cow was stabbed on three different occasions. When she was hoven the second and third times, she came to us for relief, and stood quietly waiting for the operation to be performed.”—[*Genesee Farmer*.]

FATTENING CATTLE.

We have received an account of a barren Heifer fattened by John Brabson, esq. of Boyd's creek, Sevier county, E. Ten.—which, though it may not excite the admiration of those who are familiar with the accounts of the weight, &c. of the mammoth oxen frequently slaughtered in the northern markets, ought to excite emulation in the breasts of the great mass of our Tennessee farmers, whose beef we fear is too generally of a quality not to be compared with this. We are not informed of her age, but this heifer, when slaughtered on the 3d of February last, weighed as follows:

	lbs.
Nett Beef,	715
Tallow,	208½
Hide,	82

The quantity of Tallow shows that the beef was of a quality rarely to be met with, we apprehend, in Tennessee, and we have no doubt, that had the whole been sold even at the ordinary prices, Mr. Brabson, after deducting the price of fattening, would have received a nett profit from this animal, more than double that which our farmers in general receive from the sale of their cattle.—This heifer was fed on clover hay and corn until about one month prior to the time of slaughtering, during that month on clover hay and corn dumpings. She was not close fed more than six weeks, but ran the preceding season on clover pasture.—We beg our readers to make an estimate of the expense of fattening, and of the value of this heifer, to compare it with a similar estimate of the cost and value of the course ordinarily pursued in fattening cattle amongst us, and then to pursue that course which interest shall dictate to be the most profitable.—[*Tennessee Farmer*.]

MANAGEMENT OF COWS.

Cows which are shortly expected to calve ought to be lodged at night in some convenient place for a week or two before calving, as it might be the means of saving the life of the calf, and, perhaps, of the dam likewise. The day and night after a cow has calved she should be kept under cover, and her drink should be lukewarm. Let her not be exposed for some time to the dampness of the night.

Cows which are near calving should be fed with better and more substantial food than usual. Grain of any kind is now useful, but it should be crushed, bruised or coarsely ground. If the cleaning of a cow after calving be delayed, it may be promoted, according to Deane's N. E. Farmer, by giving her a pail of warm water, with some ashes in it. Or according to the Grazier's Guide, the only thing to be given is toast and weak wine, or good cider or perry. If wine be preferred, mix it with an equal quantity of water. This toast should consist of four pints of wine and water, and about a pound and a half of bread toasted.

Inflamed teats should be washed with two drachms of sugar of lead in a quart of water.—Should tumours appear, apply a common warm mash of bran with a little lard.

To prevent cows from sucking their own milk, it is said that rubbing the teats frequently with the most feted cheese that can be procured, is an effectual remedy.—*Complete Farmer*.

THE GARDENER.

SCARCE APPLES.—*The Quince Apple*.—The editor of the *Yankee Farmer*, who states that he has the original tree, describes it as being vigorous and bearing alternate years. He says the fruit is but little known, but is quite large and excellent for cider, for cooking and for the table; for the latter use, when ripe, it is considered equal, if not superior to any other kind. It is very juicy though hard until thoroughly ripened; then it is mild, rich, sprightly and delicious.

Clark's Russet.—These apples were raised from scions set in the garden of Mr. Ira Clark, of Cornish, Me. The tree bears abundantly in alternate years. The fruit is of medium size, very rich and juicy; good for cooking and for the table and keeps good till May or June. In flavor and richness it is superior to the Roxbury Russet, and is a great bearer.

TO PRESERVE FLOWERS—Loudon's *Encyclopedia of Gardening* gives the following directions for preserving flowers. They may be acceptable to some of our readers at this season:

“Flowers may be preserved, when gathered, by inserting their ends in water, moist earth, or moss, and may be freshened, when withered, by sprinkling with water, and putting them in a close vessel, as under a bell-glass, hand-glass, flower-pot, or in a botanic box: if this will not do, sprinkle them with warm water, or with spirits of wine, or ether; and if this fails, insert their ends in water heated to 80 or 90 deg. and cover them with a glass.

[From the *American Gardener's Magazine*.]

NEW AND BEAUTIFUL PLANTS.

Notices of new and beautiful Plants figured in the London Floricultural and Botanical Magazines: with some account of those which it would be desirable to introduce into our gardens.

Edwards's Botanical Register, or Ornamental Flower Garden and Shrubbery. Each number containing eight figures of Plants and Shrubs. In monthly numbers, 4s. colored, 3s. plain. Edited by John Lindley. Ph. D., F. R. S., L. S., and G. S., Professor of Botany in the University of London.

Curtis's Botanical Magazine, or Flower Garden Displayed, containing eight plates. In monthly numbers, 3s. 6d. colored, 3s. plain. Edited by William Jackson Hooker, L. L. D., F. R. A., and L. S., Regius Professor of Botany in the University of Glasgow.

We commence with the first Nos. of the volumes of the above works for 1835, to give our readers a description of such beautiful and interesting plants as are figured in them, worthy of in-

troduction into our gardens. We had this in contemplation when we commenced our *Magazine*, but deferred our notices until we should receive the Nos. of the present year. We believe they will prove one of the most interesting portions of our *Magazine*; next to the possession of a new or rare plant, is the gratification of reading of its great beauty and elegance, its habits and its character; and so far as we can aid in furnishing our readers with such information, it will be our endeavour to do so.

The works named at the head of this article, as well as all others of a similar character, are very expensive, and not likely to be in the possession of but few amateurs or gardeners. We shall therefore make such extracts and remarks as will give the reader as distinct an idea as possible of every plant.

We have arranged the different genera according to the natural system of Jussieu, taking the orders in course; this method, we hope, if not particularly benefiting all our readers, will not be read with less interest.

Class I. Plants having distinct flowers and sexes.

Sub-class I. Exogenous or Dicotyledonous Plants, (with two seed leaves or cotyledons.)

Division I. Plants with a polypetalous (many-leaved) corolla.

III. *Ranunculaceæ*. ANEMONE—*vitifolia*. Wallich. Vine-leaved Anemone. Grows about a foot and a half high; perennial; flowers white; a native of Nepaul; increased by division of the root: figured in the *Bot. Mag.* t. 3376.

This according to the plate is a very beautiful species of the Anemone, very few of which are cultivated in our gardens. According to Dr. Wallich, “it is one of the commonest as well as most ornamental flower plants in Nepaul, where it grows in all the forests of the great valley and the surrounding mountains, delighting in the most shady, retired, and moist situations in the vicinity of rills and torrents.”—(*Bot. Mag.*, January.)

LX. *Proteaceæ*. BANKSIA—*speciosa*. R. Brown. Showy Banksia. Flower not very ornamental, but valued for its “beautiful foliage and graceful habit.” *Bot. Register*, t. 1728.

This “rare species” has never flowered but three times since its introduction into England. It is a native of “Lewis's Island, on the south coast of New Holland.”—(*Bot. Reg.*, Jan.)

C. *Sapindaceæ*. EUPHORIA.—Longan. The Longan tree. A tender stove plant; valued for its fruit; grows to the size of a large tree in its native climate, (China.) *Bot. Register*, t. 1729.

“The Litchi and the Longan are two of the finest fruits that the Chinese possess.” Both are occasionally sent to England as presents, but they are never seen in the shops. They have, when imported, a brown shell, which in the former is prickly, in the latter simply warted, and contain a single seed surrounded in a succulent aril; having much the taste of an excellent Raisin, only more vinous.” This species has never produced fruit but once in England.—(*Bot. Reg.*, Jan.)

CXLIV. *Portulacææ*. CALANDRINIA—*speciosa*. Lindl. Showy Calandrinia. An annual plant; very showy and beautiful; flowers from May to October; grows about six inches in height;

propagated by seeds, in sandy loam; introduced from California to the London Hort. Society's garden in 1831; figured in Bot. Mag. t. 3379.

A beautiful species according to the plate, and highly desirable for the flower border. It is somewhat similar to the *C. grandiflora*. Dr. Lindley states in the Bot. Reg. (July, 1834) that "when the sun is shining full upon it, with all its large, rich, crimson blossoms fully expanded, and reposing upon the soft, velvety bed formed by its succulent leaves, it is a most beautiful object." It should be grown in a dry situation, on a rather rich soil.

We introduced the seed of this species this year, and have distributed it among several amateurs. We have also ourselves, sown a small quantity of the seed, the plants of which are now flourishing finely.

RARE FLOWER—Perhaps few of our readers are aware of the effects which may be produced on fruits and flowers by what is commonly called budding, or inoculating the limbs of trees. We yesterday saw a flower, from the garden of a gentleman of this county, (who has made many experiments of this kind,) combining the qualities of the Rose and Peach Blossom. The stem and leaf were of the peach, except that the latter was slightly serrated, similar to the rose leaf; the leaves of the flower were of the color of the peach, and taste of the rose; the farina resembled that of the peach. The flower was about four times the size of the peach blossom.—*Fayetteville Observ.*

INSTINCT OF PLANTS.—Dr. Hancock says if a vessel of water is placed within 6 inches of a cucumber vine, that in 24 hours time the vine will alter the direction of its branches, and not stop till it comes in contact with the water. And if a pole is placed at a considerable distance from an unsupported vine, the branches of which are proceeding in a contrary direction from that towards the pole, the vine will in a short time alter its course, and not stop till it clings round the pole. But the same vine will carefully avoid attaching itself to low vegetables nearer to it, as the cabbage, &c.

GREEN VEGETABLE MANURE.—The value of green vegetables as manure was strikingly proved by me in the spring of 1833. I had a trench opened of sufficient length to receive six sets of potatoes; under three of these sets I placed green cabbage leaves which yielded about double the produce of the other.—(*J. D. Parks, Dartford Nursery, January, 1834.*)

TOP ONIONS.—One of the most profitable crops to which a farmer can appropriate a portion of his grounds is top onions. Independent of the value of the bulb, or full-grown onions, the top onions will command from two to three and a half dollars per bushel.—*N. Y. Farm.*

At a recent report to the Legislature of *Indiana*, there appears to be a lamentable deficiency of teachers in that State; only about one fourth of the children of suitable age, attended school in 1834; only 1 in 6 can read; 1 in 9 write; but 1 in 100 study geography, and only 1 in 145 grammar.

MARYLAND HORTICULTURAL SOCIETY.

Saturday, May 9.

The following articles were exhibited.

By Mr. Thomas Dixon, gardener to Mrs. Donnel, a very fine Cauliflower.

By Mr. Wilhelm, gardener to Mr. Ridgely, of Hampton, a fine dish of Snap beans, 6 cucumbers, and 2 cauliflowers.

By Mr. John Feast, perlargonius, countess of Liverpool; and obscura; cistus albidus; arestolochia sempervirens; ornithogalum corimbosum; 3 varieties of Ixia; valeriana alba; pulmoria, and cerulea; spissnassutrex; hesperus nocturnum; Persian lilae, tulips, &c.

By Mrs. Ridgely of Hampton, two very large bouquets of splendid flowers, consisting of tea and china roses, &c.

At 12 o'clock, the committee of the whole awarded the weekly premium to Mr. Wilhelm, gardener of Mr. Ridgely, of Hampton, for snap beans, cucumbers and cauliflowers.

An extra meeting of the Council of the Maryland Horticultural Society, was held on Saturday, May 9, when the corresponding secretary presented a letter from Benjamin Maund, Esq. of Dorchestershire, England, accompanied by a volume and numbers of the "Botanic garden," a splendid Botanical periodical. Ordered by the council, that the thanks of the society be conveyed to Mr. Maund for his valuable and very acceptable present; and that the council nominate Benjamin Maund, Esq. to the society as a corresponding member.

Ordered, that the next annual election of officers of the Society be held on the 27th May, inst. the first day of the exhibition, and that notice to that effect be published.

GIDEON B. SMITH, Cor. Sec.

FOREIGN ABSTRACT.

France—An arrival at New York from Havre, brings Havre dates to the 12th, and Paris to the 11th of April.

The discussion of the bill for the payment of the American indemnities was still going on in the French Chambers. M. Bignon had moved an amendment, proposing an appropriation of 12 millions of francs, and to negotiate for the balance—The opinion was that the proposition of M. B. would be rejected, and the bill finally pass by a majority of at least fifty, (some accounts think the majority will not be so large,) for the payment of the entire 25,000,000 francs.

The important event was announced by a telegraphic despatch, on the 11th April, in Paris, that the king's daughter, the queen of Belgium, had given birth to a prince, and that she herself was doing well.

The French academy have just completed their Dictionary of the French language, of which the last acknowledged edition was printed in 1762. A permanent committee of six of the most learned members of that body have been employed for many years in the correction and enlargement of the dictionary.

The U. S. frigate Constitution is lying at Havre awaiting the determination of our minister, Mr. Livingston, for his future destination.

Havre Market, April 12—The Cotton market

was in a very animated state during the first four days of the week, but towards the close it became calm in consequence of the large arrivals and the large purchases having satisfied the demand for the moment. Prices remain firm, even 172f 50 has been paid for 60 bales choice Louisiana, stock 36,000 bales. Rice calm. Ashes have for a long time been without demand.

Stock Exchange, Paris, 11th April—The rise in the rates is sustained. Speculators confidently expect that the vote of the Chamber of Deputies will terminate our difficulties with the U. States, and that the accession to power of a new ministry in England will bring about a pacification of the Peninsula.

Still later from England.—Intelligence from London to the 10th April, has been received.—The ministry had not yet been formed. Lord Melbourne is believed to have charge of the formation of the new cabinet, but as yet had not been successful.

The markets were good and continued to improve, though money was scarce.

From South America and Mexico advices have also been received—tranquillity prevails for the present in the former, and the revolution in the latter is in a progressive state.

Jamaica—The emancipating law does not seem to work well in Jamaica. There is much bitterness and great hostility of spirit between those who approve the course adopted towards the apprentices, and those who oppose it. The preachers come in for a full share of ill-feeling, being charged with inciting the apprentices to disobedience. The apprentices themselves too, partake of the general leaven, and keep the courts busy listening to their complaints, many of which are groundless.

DOMESTIC SUMMARY.

A great project is spoken of in the western papers, of constructing a rail road from St. Louis, Missouri, to some point on the Ohio River near Wheeling, Va.

There were two fires in New York, during the past week, not attended however with much loss of property, but it is supposed that five persons lost their lives. Three individuals escaped from one of the houses by leaping from the garret window.

The governor of Ohio and his suite have returned to the seat of government without being able to complete the survey of the disputed territory. He intends, says a letter from Columbus, to convene the legislature about the 1st June, for the purpose of obtaining an appropriation to defray the necessary expenses of such a force as may be necessary to accomplish the intention of the legislature.

Adams, the murderer of Capt. Tilden, of this port, is to be hung in this city, on the 29th instant.

Books of subscription is about being opened to the stock of a Rail road, from Wrightsville, Pa. on the bank of the Susquehannah, opposite Columbia, to the town of York.

The shad and herring caught on the Potomac this year are said to be very fine, and on the whole, that the fishermen have made a good season of it.

The State loan of Pennsylvania has just been taken at a premium of 12,02 for every 100 dollars.

Tennessee Wine.—We have been presented, says the Nashville Republican, by Col. Wilough Williams, Sheriff of our county, with three bottles of wine of his own manufacture, one of Madeira one of Champaigne, and one made from the Cape grape. It is two years old, and the colour and body are fine. The champagne especially, is much superior to that for which we sometimes pay 15 dollars per dozen.

Some of the capitalists of Philadelphia, have invested 150,000 dollars to be applied to the improvement of the town of New Castle, Delaware.

The Chillicothe Bank recently had a severe run upon it for specie, which it withstood most manfully, and by an exposition of its affairs subsequently made, shows that its resources exceed its liabilities more than two dollars for every one. These runs upon moneyed institutions should be discountenanced by every good man in the community, as they only serve to destroy confidence and derange the monetary system; and indeed all their tendencies may be said to be evil.

There have been a few cases of cholera at Memphis, Tennessee.

The Chancellor of Maryland has granted an injunction prohibiting the trustees of the Bank of Maryland from receiving certificates of deposits, checks, or notes of the bank, in payment of the debts due that institution. This injunction continues until answer and further order by the Chancellor. In the mean time the trustees will proceed at law, for the recovery of the claims due to the bank.

MISCELLANEOUS.

Stock Jobbing in the cities of New York and Philadelphia seems to have become a mania; from a comparative table published in the New York Daily Advertiser, of sales made in the stocks of ten companies, seven of rail-roads, one of a canal and two of banks, it appears that the rise in price between Nov. 1834 and April, 1835, is from 23 to 130 per cent. If the rule be a just one, that where there are great profits there are great risks, there must be great peril in indulging in such gambling, for it is nothing better.

INTERESTING FACT IN NATURAL HISTORY.—Some of the English workmen engaged of late in conducting the principal mining associations in Mexico, carried out with them some English greyhounds of the best breed, to hunt the hares which abound in that country. The great platform, which is the scene of sport, is an elevation of about 9000 feet above the level of the sea, and the mercury in the barometer stands constantly at the height of about nineteen inches. It was found that the greyhounds could not support the fatigue of a long chase in this attenuated atmosphere, and before they could come up with their prey, they lay down gasping for breath; but these same animals have produced whelps which have grown up, and are not in the least degree incom-

moded by the want of density in the air; but run down the hares with as much ease as the fleetest of their race.

The subjoined lament is full of sweetness and of feeling. Its interest is greatly enhanced by the associations which it calls up of its gifted author, *Richard Brindsley Sheridan*,—a man whose eloquence always commanded the profoundest respect of the British House of Commons—whose greatest effort, his speech in the prosecution of Warren Hastings, aroused the whole nation, and threw them into a feeling of indignation bordering almost on phrenzy—whose situation as a minister of Great Britain, combined with his resistless eloquence, highly polished style of rhetorical oratory, gave him, while in the zenith of his power, an influence and station, alike enviable and exalted:—but whose after life was embittered by the loss of fortune—the desertion of friends,—the frowns of enemies—and in fine, in his last illness, by cold penury and abject want. His fate is at once a comment and a moral upon the unstableness of worldly greatness and of wealth, and should teach us how incomparably worthless are all those attractions which derive their value from a prince's favor, or the splendor of a court. With all the faults and weaknesses, which characterised the last years of poor Sheridan, he possessed a reputation as a man, an orator, and a statesman, which will endure whilst letters shall live, the nobler sympathies of our nature have a resting place, or genius an admirer on earth.

THE GRIEF OF SHERIDAN.

ON THE DEATH OF HIS WIFE.

She is gone from this bosom, who gave
To its throbbings the gladness of life;
They have borne to the cold, cold grave,
My joy and my comfort—my wife.

Her smile was the May-morning clear,
Her look was the blue sky above,
Her mind was the flow'ry parterre;
And her bosom the temple of love.

Her voice was the music that flows
From the shell of the echo of joy;
And her eyes, like the fair star that throws
Benignity over the sky.

But May-morning's veiled in a shroud;
It hath dawned on me sweetly its last;
My blue sky the vapors becloud,
And my temple's laid waste by the blast.

They have borne my whole world to the tomb
Of all earth, for me nothing appears,
But solitude, sorrow and gloom,
And the last of man's solaces—tears.

It is this latest solace I crave;
'Tis a tribute I owe to my love;
'Till I sleep by her side in the grave—
I would weep till I join her above.

WASHINGTON IRVING, a man who has rendered himself illustrious in Europe, as well as in this his native land, by his genius and the fine moral feeling which breathes in every line of his numerous writings, has been appointed Regent of the University of New York, vice the Hon. John Sudam, deceased.

On Death—"Heavens! what a moment must be that, when the last flutter expires on our lips! What a change! Tell me, ye who are deepest read in nature and in God, to what new worlds are we borne? What new being do we receive! Whither has that spark, that unseen, that uncomprehended intelligence fled? Look upon the cold, livid, ghastly corpse that lies before you!—That was but a shell, a gross and earthly covering, which held for a while the immortal essence that has now left it—left it, to range, perhaps, through illimitable space; to receive new capacities of delight, new powers of perception; new glories of beatitude! Ten thousand fancies rush upon the mind as it contemplates the awful moment between life and death! It is a moment big with imagination's greatest hopes and fears; it is the consummation that clears all mystery—resolves all doubts—which removes contradiction and destroys error. Great God! what a flood of rapture may at once burst upon the departed soul. The unclouded brightness of the celestial regions—the pure existence of ethereal being—the solemn secrets of nature may then be divulged; the immediate unity of the past, the present and the future; strains of unimaginable harmony, forms of imperishable beauty, may then suddenly disclose themselves, bursting upon the delighted senses and bathing them in immeasurable bliss! The mind is lost in this excess of wondrous light, and dares not turn from the heavenly vision to one so gloomy, so tremendous as the department of the wick-ed! Human fancy shrinks back appalled.

Ink.—The bark of the chesnut is said to contain twice as much tan as that of the oak,* and gives with sulphate of iron a beautiful black ink. The color which this tan produces is less liable to change by the sun and rain, than that produced by sumac.

**Note by the editor of the Farmer & Gardener.* This is an error. The experiments of Sir Humphrey Davy proved, that the tanning principle contained in the oak bark was as 29 to 21 in favor of the bark of the middle sized oak over the Spanish chesnut—that the coppice oak was as 32 to 21.

To give Tools a hard temper.—Heat the tool till it is red, cherry color; take it from the fire, rub it with a piece of tallow, put it immediately into strong vinegar, in which you shall have diluted some soot.

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BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,	bushel.	2 50	3 00
CATTLE, on the hoof,	100lbs.	7 50	
Slaughtered,	"		
CORN, yellow,	bushel.	82	83
White,	"	84	85
COTTON, Virginia,	pound.	17½	18
North Carolina,	"		
Upland,	"	18½	20
FEATHERS,	pound.	35	37
FLAXSEED,	bushel.	1 50	1 90
FLOUR—Best white wheat family,	barrel.	7 50	8 00
Do. do. baker's,	"	6 75	7 25
Do. do. Superfine,	"	6 00	6 25
Super Howard street,	"	6 00	6 12
" wagon price,	"	5 87	6 00
City Mills, extra,	"		
Do.	"	6 00	6 25
Susquehannah,	"	6 00	
Rye,	"	4 50	4 75
GRASS SEEDS, red Clover,	bushel.	5 00	5 25
Timothy (herds of the north)	"	2 50	3 00
Orchard,	"	none	
Tall meadow Oat,	"	2 00	2 50
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.	18 00	20 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
Hogs, on the hoof,	100lb.	6 00	6 75
Slaughtered,	"		
HOPS—first sort,	pound.	12	20
second,	"	10	
refuse,	"	8	
LIME,	bushel.	33	35
MUSTARD SEED, Domestic,	"	5 00	6 00
OATS,	"	49	50
PEAS, red eye,	bushel.		
Black eye,	"		1 50
Lady,	"		
PLASTER PARIS, in the stone,	ton.	3 25	3 3½
Ground,	barrel.	1 37	
PALMA CHRISTA BEAN,	bushel.	2 00	
RAGS,	pound.	3	4
RYE,	bushel.	90	92
Susquehannah,	"	90	95
TOBACCO, crop, common,	100 lbs	4 00	5 00
" brown and red,	"	5 00	6 00
" fine red,	"	6 00	8 00
" wrappery, suitable	"		
for segars,	"	8 00	11 00
" yellow and red,	"	8 00	12 00
" yellow,	"	9 00	12 00
" fine yellow,	"	12 00	15 00
Seconds, as in quality,	"	4 00	5 00
ground leaf,	"	5 00	9 00
Virginia,	"	5 00	10 00
Rappahannock,	"		
Kentucky,	"	6 00	10 00
WHEAT, white,	bushel.	1 35	1 40
Red,	"	1 30	1 32
WHISKEY, 1st pf. in bbls.	gallon.	scarce	38
" in hhd's,	"	36	37
" wagon price,	"	31	33½
WAGON FREIGHTS, to Pittsburgh,	100 lbs	1 50	
To Wheeling,	"	1 75	
Wool, Prime & Saxon Fleeces,	pound.	62 to 75	26 to 28
Full Merino,	"	52	62 24
Three fourths Merino,	"	45	52 23
One half do.	"	40	45 23
Common & one fourth Meri.	"	35	40 22
Pulled,	"	35	38 23

BAKEWELL SHEEP.

INQUIRIES have been made of the editor of this paper at what prices a moderate number of Bakewell sheep, of pure blood and approved forms can be procured for. Persons having such to dispose of, will please address the editor by letter post paid, stating price, age and number, which they may be willing to sell. The sheep to be delivered in Baltimore may 19

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.		
BACON, hams, new,	pound.	11	11½
Shoulders,	"		9½
Middlings,	"	9½	
BUTTER, printed, in lbs. & half lbs.	"		37½
Roll,	"	28	31
CIDER,	barrel.		
CALVES, three to six weeks old,	each.	3 00	6 00
COWS, new milch,	"	17 00	30 00
Dry,	"	8 00	12 00
CORN MEAL, for family use,	100lbs.	1 80	1 85
CHOP RYE,	"	1 87	1 94
EGGS,	dozen.		12
FISH, Shad,	barrel.	7 25	
Herrings, salted, No. 1,	"	4 25	
Mackerel, No. 1,	"	7 25	
Cod, salted,	cwt.	2 25	
LAMES, alive,	each.		
Slaughtered,	quart'r		
LARD,	pound.	9	10
ONIONS,	bushel.		100
POULTRY, Fowls,	dozen.		
Ducks,	"		
POTATOES, Irish,	bushel.	56	87½
Sweet,	"	1 25	1 50
TURNIPS,	"		
VEAL, fore quarters,	pound.		
Hind do.	"		

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par	VIRGINIA.
Branch at Baltimore,	do	Farmers Bank of Virginia, ¾a
Other Branches,	do	Bank of Virginia,
MARYLAND.		Branch at Fredericksburg, do
Banks in Baltimore,	par	Petersburg,
Hagerstown,	¾a	Norfolk,
Frederick,	do	Winchester,
Westminster,	do	Lynchburg,
Farmers' Bank of Mary'd, do		Danville,
Do. payable at Easton,	do	Bank of the Valley,
Salisbury,	uncertain	Branch at Romney,
Cumberland,	¾a	Do. Charlestown,
Millington,	do	Do. Leesburg,
DISTRICT.		Wheeling Banks,
Washington, } Banks, ¾		Ohio Banks, generally ¾a
Georgetown, }		New Jersey Banks gen. 1¾a
Alexandria, }		New York City,
PENNSYLVANIA.		New York State,
Philadelphia,	¾a	Massachusetts,
Chambersburg,	¾a	Connecticut,
Gettysburg,	do	New Hampshire,
Pittsburg,	1¾a	Maine,
York,	¾a	Rhode Island,
Other Pennsylvania Bks. 1¾a		North Carolina,
Delaware [under \$5],	¾a	South Carolina,
Do. [over 5],	¾a	Georgia,
Michigan Banks,	5a	New Orleans,
Canadian do.	5a	

ADVERTISEMENTS

BUFFALO BERRY TREE.

SINCE it was ascertained that this tree is dioecious (the male and female being distinct trees) we have hesitated to send it when ordered, because our trees are too young yet for their sex to be developed. Under these circumstances we propose to furnish single trees (the sex being unknown) on the following terms:—Trees less than two feet in height at 50 cents each, and those above two feet at 75 cents a piece. When their sex shall have been ascertained we will furnish either male or female trees at \$1.25 each, and at \$2 per pair. By this arrangement time may be gained by taking young trees this spring and putting them out, relying on the future for mates for them, and nothing can be lost in point of price of them. We have a few from 1½ to 3 feet high, which we will put up to order on the terms above stated.

SINCLAIR & MOORE.

March 31, 1835.

RICE MEAL.

FOR sale a few kegs (containing 40lbs) of nicely manufactured rice meal, a delicious and wholesome article. Apply to SINCLAIR & MOORE, May 19 Light street.

JUST PUBLISHED

THE second edition of the Essay on CALCAREOUS MANURES, in the cheap form of a supplement to the Farmers' Register.

This edition (having been still more increased in size, since the former advertisement, though without any addition to the prices then named) contains nearly twice as much print as the first, and yet will be sold at but little more than half the price. The new matter consists principally of more full explanations—additional and new proofs—and more full and minute directions for practical operations, designed especially for the use of those who are beginning to apply marl, and have every thing on the subject to learn.

Terms. The second edition of the Essay on Calcareous Manures, is printed on 116 of the large and closely lettered pages of the Farmers' Register—(equal to more than 450 pages of the former duodecimo edition)—and will be furnished neatly covered, in pamphlet form, at the following rates:

For \$5, 8 copies on good paper, or 10 on inferior.	
\$10, 18 " " " 22 "	
\$10, 40 " " " 50 "	
\$50, 110 " " " 240 "	

No smaller number of copies than \$5 worth will be sold by the publisher. Single copies, at 75 cents, may be obtained at the bookstore of J. W. Campbell, Petersburg, Va. and of Gideon B. Smith, office of the Turf Register, Baltimore.

The packages will be sent by Mail, and all losses by mail, whether of orders containing money, or of copies, will be borne, and made good, by the publisher, upon his being certified of the money having been properly committed to the mail, and at what time, or of copies not having arrived at the proper post office. The postage on the work will be the same as on other periodicals. The postage will be paid by the publisher, when desired, for which he will deduct only half its amount, from the package of copies sent. Any other convenient mode of transmission preferred by the booksellers and any other large purchasers, will be made use of, but not at the risk of the publisher.

Payment in advance, and in current money, required in every case. Early orders from clubs of individuals, and from booksellers, are requested to be addressed to Edmund Ruffin, P. M. Shellbanks, Prince George County, Virginia.

April 28th, 1835.

may 19 2t.

HORSE MILLS—CORN CULTIVATORS, &c.

THE Subscribers offer for sale, at the MARYLAND AGRICULTURAL REPOSITORY, Light, near Pratt street, MILLS FOR GRINDING CORN AND OTHER GRAIN. They grind expeditiously, and make first rate meal. Specimens of which may be seen at their Establishment, together with the MILLS. These MILLS will be found very advantageous to farmers and planters generally, and to gentlemen owning large estates, who are in the habit of sending their grain to Mill at a distance, they would be of almost incalculable value, in the great saving of the time of a hand and cart and horse; and the Subscribers believe, that these MILLS would thus save their cost in a year, besides the great comfort and convenience of always being able to convert the grain on the place into flour, at pleasure—besides it would afford those who have large stocks, an opportunity to feed them with ground meal, and thus economise from twenty to thirty per cent. of the quantity usually consumed when fed on the grain whole.

Corn Cultivators of different patterns, both wrought and cast tires.

300 Grain Cradles, made of superior white ash wood, part of which has the natural turn, with warranted Scythes attached.

106 dozen wooden rakes.

Waldron and American Grass Scythes, by the dozen or on retail—also ready hung for use.

30 dozen Scythe Sneads.

25 boxes Scythe Stones.

Improved Wheat Fans, together with a general assortment of other Agricultural Implements.

SINCLAIR & MOORE.

BALTIMORE, May 12th.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 4.

BALTIMORE, MD. MAY 26, 1835.

Vol. II

THIS publication is the *successor* of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, MAY 26, 1835.

AMERICAN SILK HOSIERY.—The editor of the Bunker Hill Aurora, was shown a few days since some very beautiful specimens of *silk hosiery for gentlemen, entirely of American fabric*. He represents them as a neat and fine article, with every indication of durability, and as being equal if not superior to those of European manufacture.—The silk was produced and manufactured at Dedham, Mass., and sold at \$10 per lb.

It will be recollected by our readers, that in our calculations on the 12th instant, in which we compared the produce of 40 acres to be appropriated to the culture of silk, with the cost of supporting the poor at the Alms-house of Baltimore city and county, we made our estimate at \$4 per lb., and showed an excess over the latter of nearly six thousand dollars. The silk produced at Dedham, Massachusetts, to which we have alluded, sold for \$10 per lb., owing, we presume, to the superior value imparted to it in reeling.—Now then, if we were to take this as the value of the silk to be raised from the forty acres as proposed by us, it would give us \$72,000; take from that amount, the poor-house charges, \$22,848-74 $\frac{3}{4}$, and there remains \$49,151,25 $\frac{1}{4}$ cts.

We do not allude to this circumstance with a view of exciting sanguine expectations; but merely to illustrate by facts, that even the maximum price, as mentioned by us, was within the possibility of realization; for if we know ourself, and we think we do, we would not willingly mislead the judgment under any circumstances, and the more especially where disastrous consequences might result to agriculturists.

Judging from appearances, says the editor of the New England Farmer, the demand for cocoons and reeled silk, the coming season, will exceed the supply in a thousand fold. The silk manufactory in Dedham, Mansfield and Boston, are depending principally upon the new crop for the raw material. The last year's crop is already ex-

hausted, and there is scarcely, as he states, a bale of foreign silk to be found in the commercial cities. Those, therefore, who may raise a crop this season may depend on its being sought for by the manufacturers and at a very liberal price.

To encourage the culture of the mulberry and silk worm, the legislature of Massachusetts have passed a law granting a premium of 50 cts. per lb. on all the reeled silk raised in the state for two years. The good work must go forward!!

Since the above was in type, we learn from the Providence, Rhode Island, Journal, that a large association exists at that city, under the title of the Valentine Silk company, "who have entered upon the growth of the mulberry, rearing of the worms, and manufacture of the silk in good earnest.—They have made a considerable quantity of rich stuffs in silk already; and they have a six-horse engine power, 30,000 trees from 4 to 5 years old, and from 6 to 8 feet high. Each tree, on an average, yielding half a pound of silk a tree—worth, when on the spool, \$5 per pound—making the income of the whole plantation \$75,000 per year."

This estimate we think too high, and we will briefly state our reasons. All the results as far as they have come under our knowledge, prove that a mulberry tree of 6 years of age, yields about 30lbs of foliage, which is competent to feed 600 worms during the season, so that it would take 2 $\frac{1}{2}$ trees, instead of 1, of the age mentioned above, to raise half a pound of silk, which at the general average of 3,000 worms, (or cocoons,) to a pound of reeled silk, would give us 6,000lbs of silk, instead of 15,000 as stated above, and at the price as given, \$5 per lb, would produce \$30,000. This we presume to be a much nearer approximation to the real state of the case, than the estimate contained in the quoted paragraph. The average produce of trees of the age stated, as tested by experience, would be about 3 1-5 ounces of silk.

AGRICULTURAL SOCIETIES.—The legislature of Indiana, with a foresight which reflects great credit upon the law-givers of that striping in the confederacy, have passed a law providing for the organization of **AGRICULTURAL SOCIETIES in the several counties of that state, as also for a GEN-**

ERAL STATE SOCIETY, all which are endowed with chartered privileges. The business of organizing the societies, in their incipient state, is made a part of the *duty* of the Commissioners of the several counties, and thus they become a part of the machinery of the government of the state, who not only foster, but give them being. This early attention to a subject of such deep importance to the agricultural interests of Indiana, speaks volumes of praise in behalf of those to whom the people have confided the sacred trust of law-making; and we really should rejoice to see those who are placed in the same relation in our own and other states, willing to profit by the experience of this young but thrifty and rapidly growing sister of the west. We have with considerable labor, prepared an abstract of the law, which we shall speedily publish for the information of our readers.

AGRICULTURAL BOUNTIES.—The legislature of Connecticut duly impressed with the importance of introducing the silk culture into that state as a branch of its husbandry, have passed a law granting a bounty of one dollar on every hundred mulberry trees, which may be set out at such distances from each other as will best favor their growth and the collection of their leaves, and cultivate them until they are five years old. The same law grants a bounty of fifty cents on each pound of silk reeled in the present improved method.

Such attention by the legislative bodies of our country, towards the agricultural interests, we should be happy to see more general, as they serve to give an impetus to enterprise, and call into usefulness, energies which long continued neglect had rendered almost lethargic.

A writer in the Maine Farmer thinks that 150 bushels of Indian corn might be raised on an acre of land, and he affirms, that his opinion has been carefully made up; that it never has been his object to countenance wild and visionary schemes of fancied improvements; but to establish simple truth. He thus explains the possibility of effectuating the desired object:

"150 bushels is 38,400 gills, of course if we can raise this number of ears on an acre, that will make one gill each, it will be done. We all

know that it does not require a very large ear to yield one gill of shelled corn."

Now this is all very true, but the question to be determined is, can an acre of ground support the requisite number of stalks, and mature the grain? We do not pretend to decide either one way or the other, but may be indulged with the remark that the writer is most sanguine in his calculations; more so, perhaps, than will ever be realised by his results.

THE FRUIT—The editor of the *Wheeling Gazette* says, that "since the return of mild weather he has examined the buds of several kinds of fruit in the country, and have found nearly all the cherries destroyed, not one in twenty being alive; the peach trees were injured by the cold weather of last winter, but there is yet a prospect of a tolerable crop of fruit. The upland orchards are probably less injured than those on lower situations."

By the bye, the fact of the fruit trees in high situations being less injured than those in low grounds, should admonish farmers and others who may plant out orchards, not to locate them in bottoms, which are always damp and much colder than more elevated grounds. Experiments made during the last winter showed a difference in favor of the latter, if we mistake not, of about fourteen degrees; and this fact should serve to instruct us to reject the too prevalent opinion that hollows and bottom lands are warmer than hills. The idea of bleakness has been associated in most of our minds from our infancy with the latter; and, probably, when a cold, piercing northwester breaks over the brow of a hill, in its impetuous and chilling course, it may be more searching to the human frame; but then it should be recollected, that these very high winds, so shrewd and penetrating withal to the sensibilities of man, is an enemy to frost, and affords protection to vegetable being; whilst on the other hand, the continual damps and moisture in low grounds serve to generate it, and thus blight those germs, on the unimpaired integrity of which, all fruit is dependent for its vitality and power to ripen.

EARLY FRUIT AND VEGETABLES.

Mr. Mitchell a distinguished Horticulturist of Charleston, S. Carolina, recently presented the editor of the *Courier*, of that place, with a couple of bowls of most beautiful full-grown ripe cherries of most exquisite flavor.

Col. Perkins, of Boston, has large peaches in his hot-house, and grapes that will be ripe in about six weeks—and a correspondent of the *New York Star*, says that he has already tasted this season ripe peaches and grapes, from the hot-house of Mr. Prime, at Hell-gate.

In Baltimore on Saturday last, our market was

tolerably well supplied with green peas at \$1 25 per peck.

In the vegetable way, the good folks of Florida are equally blessed. As early as the 7th inst., new Irish potatoes of good size, had been upon the tables in that quarter, and the early corn was ready to tassel.

THE FARMER.

SOILS AND PLOUGHING—Sir *Humphrey Davy* in his lecture on soils, says that the methods of cultivation must be different for different soils. The same practice which will be excellent in one case may be destructive in another. Deep ploughing may be a very profitable practice in a rich thick soil; and in a fertile shallow soil, situated upon cold clay or sandy subsoil, it may be extremely prejudicial. In a moist climate when the quantity of rain that falls annually equals from 40 to 60 inches, a siliceous sandy soil is much more productive than in dry districts; and in such situations, wheat and beans require a less coherent and absorbent soil than in drier situations; and plants having bulbous roots, will flourish in a soil containing as much as 14 parts out of 15 of sand.

Even the exhausting powers of crops will be influenced by like circumstances. In cases where plants cannot absorb sufficient moisture, they must take up more manure. And in Ireland, Cornwall and the western highlands of Scotland, corn will exhaust less than in dry inland situations. Oats particularly in dry climates, are impoverishing in a much higher degree than in moist ones.

THE CHENOPODIUM QUINOA—The plant described below, has been successfully cultivated in and near this city by Mr. *Gideon B. Smith*, since 1829. In 1830 he presented us with a dish of it, and we can bear testimony to its fine qualities. At the instance of Mr. Smith, a lieutenant in our navy procured two bottles of the seed from a farmer in the mountains some distance from Chili. They were procured in the interior at the suggestion of Mr. S., because the article as sold in the shops of Peru but rarely germinates, owing to its having been submitted to a process of heating to destroy the egg of an insect of the wevil kind, which is deposited on it. To this cause it is, that we are to ascribe the ill success which has generally attended the attempts to introduce its culture both in Europe and this country. It has been brought here by our sea-captains occasionally since about 1805 or 1806; but has rarely if ever vegetated, and was given up by most who tried its cultivation as impracticable: fortunately, however, it fell to the lot of a man who never tires in the pursuit of science,—or in his endeavors to add to the comforts of life,—to unfold the mystery

of its unfruitfulness, and apply the remedy,—and to him our countrymen are indebted, for one of the greatest delicacies of the vegetable family which has been introduced among us for many years.

Chenopodium Quinoa—Humboldt states (as we have quoted in the *Encyc. of Gard.* 2d edit., §948,) that this plant, in Mexico, ranks in utility with the potato, the maize, and the wheat. The leaves are used as spinach or sorrel, or as greens; and the seeds in soups and broths, or as rice.—Throughout great part of South America, and especially in Peru, the seeds are in as common use as rice is in Hindostan. The seeds are considered more heating than rice, and on that account they are frequently given to domestic poultry to make them lay early. The plant is an annual, and in general appearance resembles the *Atriplex hortensis*, or French spinach; and, under the same circumstances of soil, climate, &c., will grow to about the same height as that plant. The seeds are small, yellowish white, round, somewhat flattened, about a line in diameter, and, on a cursory glance, might be mistaken for those of millet. Mixed with the latter seeds, and fermented, a pleasant kind of beer is said to be produced. They are contained in a single envelope, from which they are very easily separated. The *Quinoa* was first introduced into England in 1822; and it has ripened seeds at Kew. No particular notice, however, appears to have been taken of the plant till this season, when it has been grown by A. B. Lambert, Esq., V. P. L. S., at Boyton, where it has ripened abundance of seeds on plants varying from 3 ft. to 7 ft. in height. These seeds Mr. Lambert will, no doubt, distribute all over Europe; and, we trust, the plant will now have a fair trial both in gardens and fields. To do any good in producing nutritious seeds, the plant should be subjected to field culture, in which we see not the slightest difficulty. It might be sown very thinly in drills, 3 ft. apart, at about the same season as barley, and the plants afterwards thinned to the distance of 1 ft. apart. There appears at present, no reason whatever why it should not become as common in the fields of Europe as barley, wherever that grain can be cultivated. In the meantime, we hope it will be tried first in gardens, in order to raise abundance of seed for future experiments in the field.—*Gard. (Eng.) Magazine*.

CULTURE OF THE RUTA BAGA—We make the following extract from a communication on the subject by Mr. *John Barstow*, of Mount Hope, Maine, published in the *Mechanic and Farmer*:

RUTA BAGA—**SWEDISH TURNIP**—**LAPLAND TURNIP**—different names applied to the same vegetable, was introduced into this country since the commencement of the present century and like most other innovations was frowned upon by the generality of our farmers. It soon however got into good company by the influence of Messrs. Lowel, Prince, Buel, Derby, and others, and maintains its standing among the more intelligent agriculturists in N. E. and the Northern States. Like other kinds of turnip it does better in the northern than in the southern sections of the Union. Our own State has produced greater

crops than any other. There is nothing but a little enterprise and observation wanted to make it a most valuable acquisition to our stock growing community. Maine, is destined to become one of the first if not the first state in the Union for stock. We can never compete with other sections in grain; but we can become successful competitors in the different races of animals, and *wool will be our great staple, and hereafter supply factories, standing, where now is heard only the rushing of waters and hootings of the night birds!!!*

Soil.—Any soil suitable for corn will answer for the Ruta Baga. The greatest crops grown in the State were on what is called our rocky upland, such as is seen on all our hills free from ledge. A sandy or clayey loam answers very well, if not very light or stiff. The crop of H. Warren, now of this city, was grown in 1833 on rocky land, one fourth of an acre producing 375 bushels. That of Mr. Lane of Anson, 1834, same soil, 288 bushels on one fourth of an acre. My own in 1835, more than 1350 on an acre and a half, and on a part of the field more than 1100 bushels per acre was in part on a light clay loam. Either of these crops is believed greater than any for which a premium has been awarded, by the Mass. Ag. Society.

Seed Time in Maine.—As soon as the season is suitable for planting corn, sow the turnip. If sown sooner, the garden flea will devour the leaf, before the third one starts, and blast your hopes; if delayed much after the first of June, the crop will not attain maturity. A few rows, sowed the 25th June along side of some sown the latter part of May, did not yield so much, by more than half.

Preparation of Soil.—If you cultivate on a stiff soil, plough 6 or 8 inches deep the fall previous. In the spring cart on 20 cords winter manure, not very coarse, to the acre, cross plough, 4 to 6 inches and harrow well. Sheep manure I have found better, than that from neat stock. I have grown 600 bushels to the acre on sandy loam by carting on the sward 6 cords manure and spreading it even, then ploughing 5 inches deep, turning the sward, as smooth as possible and laying on the furrows 5 cords leached ashes, and harrowing lengthways of the furrows. If the soil is quite wet, ridge by turning two furrows together with a horse plough, which will bring the rows a good distance from each other. The practice of ridging on a dry soil is a bad one in this climate. I prefer spreading the manure because the fibrous roots run all over the ground in search of food, and if it is only given under the plant, they will not find so much, as if evenly distributed in the soil.

Sowing Seed.—Every cultivator, in a large way, should have a drill, which may be made by a joiner for two or three dollars, and with which, a man will plant, cover and roll an acre in two hours. About 2 1-2 feet is a good distance for the rows apart in this climate. If sown so far apart that the plants do not wholly cover the ground when grown, the roots are not so large. The root does best in moisture with shade. My general practice has been to sow the seeds in the drills where they are to grow. Some prefer transplanting, and I am not quite sure it is not as good a

way. It saves one hoeing, which is as much work nearly, as to transplant, and the roots are more uniform in size. About one pound of seed is the right quantity to the acre—this will allow the insects a liberal supply and a chance to transplant into vacancies.

Subsequent Culture.—When the weeds begin to annoy the plants, which will be the case when they are 6 or 8 inches high, give the first hoeing, avoid wounding the plants or hilling them up.—Examine the field—and when you find the cut-worm has run his race, thin the plants, so that they may stand from 9 to 12 inches apart, and fill vacancies by transplanting, first twisting off all the large leaves from the plant. Not one in a hundred will fail. When the weeds appear again, hoe. In general two hoeings are sufficient.

Harvesting.—About the first of November, get all things in order, and on a pleasant and dry day, have a hoe sharpened for a man to go forward and cut off the tops, another to follow with a hook, which may be made of a pitchfork with the shank turned to a right angle, with which to draw the roots from the ground. Let them remain one or two days for the dirt, which adheres to dry; when 4 rows may be thrown together in heaps. The cart passing between the heaps, allows two men to fill it in a very short time.—They should not be put into the cellar till well divested of dirt. If they are they will rot before spring. If a large quantity is stored together it will be necessary to give them fresh air till December.

Use.—Other varieties are now being cultivated for the table and better quality for that purpose. These are valuable for all domestic animals, horses, neat stock, sheep, swine and poultry. If asked for which they are best? my answer would be, *all*. An old horse will become, on them, a colt, in a short time. A cow will give as much milk and make as much and as good butter as in summer, by having a bushel per day. Swine will do as well on them raw as on boiled potatoes.—Witness my own now living *wholly* on them.—Roots are perhaps *more necessary* for young animals the first winter, than after.

THE CROP PROSPECTS.

We have before us papers from New York, Pennsylvania, Virginia, North Carolina and the west, all complaining of the injuries sustained by the winter grain. In many instances it is stated that entire wheat fields have been ploughed up and other crops planted. The rye has not suffered so much. In the Valley of Virginia, where the wheat crop has failed for the last four years successively, there will not be half an average crop; and some indulge in their fears so much, as to say that a *quarter* crop will not be realized. The following from the May number of the Farmers' Register, is equally discouraging as to the effect on the rich clayey lands of the James River, (Va.) though it discloses a fact in relation to the effect of *marl*, worthy of every consideration.

"The corn planting has been made very late, by wet, as well as by cold weather: and those far-

mers who, on warm and dry soils, had been enabled to plant earlier, have had the leaves of all the young plants which had come up, cut down by severe frost. There will be very little if any early fruit. The wheat crops generally through the country show almost unprecedented injury from the severe cold of the winter. On the rich low grounds of the upper James River, usually sown entirely in May wheat, the destruction is greater than is known elsewhere. From a private letter (of March 31) from the owner of a body of this very fertile and valuable kind of land, in Goochland, we take the following statement. "Our May wheat, on the stiffest James River low grounds above the falls, is so entirely destroyed by the severity of the winter, that some have already decided to sow the land in oats—and all are hesitating whether it is not advisable, and only waiting the latest hour that it will answer to sow oats, to decide—to see what change may possibly take place in that time. At present, the prospect appears utterly hopeless. Other wheats are much injured—but this is worst."

In our own neighborhood, (Caroline co.) the wheat on marled land, having been in a measure protected by the peculiar *warming* power of that manure, shows a superiority to wheat on other lands, much greater than in proportion to the mere difference of fertility—and it may be anticipated that the benefit of marl on wheat this year, will be double as is generally seen after favorable winters."

§ Since the above was in type, we have had a very interesting conversation with the intelligent editor of the *Ohio Farmer*, who has recently travelled about 250 miles in his own state. He assures us that wherever he went, the prospects for a wheat crop were unusually bad; that it has suffered in Ohio, both from the severity of the winter and from the fly. In west Pennsylvania, and east of the Alleghanies, as he travelled hither, appearances were equally discouraging.

To the editor of the Farmer & Gardener.

SIR—Last week I passed a few days in Virginia and was much concerned to find in the parts I traversed, and to learn from other counties of the state, that the wheat crop is extremely unpromising: so much so indeed that it was the general opinion of the farmers, that the crop east of the mountains (the western part of the State I did not hear from) would not be equal in quantity to seed sown. In some situations the unusual severity of the last winter injured the crops severely, in addition to which the fly has this spring taken possession of the remainder, and left the unfortunate owner almost without a share.

One fact I learned which may be worth noticing in relation to the history of the wheat fly and its ravages:

A farmer in Spottsylvania, showed me part of a field which from some delay in getting it cleared of its last year's crop, was seeded with wheat so late in December that the seed did not vegetate till the warm weather which occurred in January, while the other portion of the same field was sowed in good season and the wheat was as forward as usual. The wheat on that portion of the field

which was sowed late was less winter-killed than that sowed early—but it is now far more thickly beset with the fly than the early wheat. Indeed I never before saw the fly in such overwhelming numbers as in this late sowed portion of the field. Has it not been generally supposed that the wheat fly deposits its eggs in the fall? and is not the fact above stated a strong disprover of this theory? I shall be happy sir, to learn your opinion on this point. I requested the owner of the field to state to you the particulars of this case which he promised to do. Your friend, respectfully,

I. I. H.

Wool.—It is stated in the New-Bedford Gazette, that a company had been formed in an eastern city, who have sent on an agent to Europe to purchase two hundred thousand pounds of wool, which they intend to sell, even at a loss, for the purpose of depressing the price of the article the ensuing season.

Notwithstanding the quantity of wool reported to have been ordered is set down with such great particularity, we have no faith whatever in the accuracy of the fact represented, nor in the motive assigned, not that we would, in the least, question the honesty of the belief of the very respectable editor of the paper whence the statement emanates. We, however, reject it, because, in the first place, persons who would enter into such an iniquitous combination against the rights and interests of their fellow-citizens, would be too fearful of provoking popular indignation to divulge a scheme of such mischievous tendency; and, *secondly*, because publicity would defeat the very aim and end of their conspiracy. But there are other motives of equal moment, which would prevent the formation of any such unhallowed associations. It must be obvious, that none but persons deeply interested in depressing the price of the article would dream of jeopardizing their means in such a scheme, and men of this character, to the eastward in particular, understand the operation of trade too well to adventure in so short sighted an enterprise. They know that demand and supply must always, by the unerring and unchangeable laws of commerce, regulate price, and that any effect which such a measure might produce, would be too temporary to be an object worthy of their consideration; that to be lastingly beneficial, their importations must be continued from year to year, and that in such a game of booty, they, themselves, would be the greatest losers. Nor do the objections to giving credence to this reported procedure—a procedure at once immoral and dishonest, stop here. The only effect which could arise from the depression of the price of wool for any considerable time, would necessarily force the growers of it from the business, a result which, by decreasing the quantity raised, would enhance the value of the article, and thus bring about a state of things the very opposite of that intended to be produced by the alleged combination.

We have noticed this report, not that we think it entitled to any serious consideration, because it carries on its very face such strong evidence of its absurdity, as to defeat its object, in the minds of all sensible persons; but to express our regret, that such crude and ill-digested rumors should find a place in our public journals, as they subserve no good purpose whatever, and only tend to engender heart-burnings and distrust at home; and to create very unfavorable impressions abroad, with respect to the honor and integrity of our people.

THE GARDENER.

REMOVAL OF A GRAPE.—There is an impression prevailing amongst many horticulturists that if a grape, which has once borne, be removed, it will not bear the ensuing season: and some go so far as to say it will not bear again in a less number of years than it did originally from the cutting. The first opinion may, probably, as a general rule be correct; but then we conceive it to be within the power of the person making the removal, to form an exception to that rule, if he observe due care in taking up and transplanting his vine. We have a very fine *Miller's Burgundy* in our yard, now four years old, which bore last year and the preceding one: from its luxuriant growth, it became troublesome to manage in the situation it first occupied, and we determined to remove it; but fearful that it would put it back in its bearing, we first consulted a gardener of considerable experience, who gave it as his opinion, that if removed it would not bear for two years, and probably not then.

This for several weeks deterred us from carrying our attention into effect: for, the grape being an excellent bearer, we were unwilling to hazard the loss of so grateful a prospective treat as we anticipated from the luscious fruit it yields. However, after reasoning with ourself—having listened, probably, more to our wishes than an impartial exercise of the judgment would warrant—we determined in our own mind, that up it should come; and, in despite of our fears, had absolutely conceived the belief, that it would not be arrested in its bearing. Things thus arranged, we employed a careful hand to dig up our vine, and personally attended to the uncovering and tracing of every root, tap, lateral, branchings, and all their delicate attachments. The tap root we succeeded in getting up without injury: the lateral roots, where too long for convenient transplanting, were carefully cut off so as to leave a smooth surface, a very keen knife purposely sharpened for the occasion, being used in the operation. Prior to taking up the vine, we had a hole prepared much deeper than necessary to receive the root. At the bottom of which we put four spadefuls of long stable manure, and upon the top of that a compost, formed in the proportion of one spadeful of leached ashes to six of rich mellow loam. After we had filled the hole with this compost, we placed the vine in it, and nearly filled it up with

a *muck* made of the same, say to within about six inches from the surface of the ground. The remaining space we had filled with the dry compost, which was well pressed down around the roots of the vine. To prevent the roots from being disturbed, we confined the branches firmly against the wall.

The removal did not take place till the 14th of March, and notwithstanding the lateness of the season, the vine has not been retarded in its vegetation in the least, is now studded with bunches of young grapes, and bids fair to afford a full crop.

This is but a solitary instance, and it is unfair to assume from its success, that it would answer as a general rule; but we incline to the belief, that if equal care were taken, in the removal of vines, the bearing in a majority of cases would not be retarded.

EFFECTS OF THE LAST WINTER ON VEGETATION.

We are indebted to an esteemed correspondent and observant farmer of North Carolina, for the following extract from a very interesting letter on the effects of the intense cold weather of the past winter, upon the vegetable tribe in his part of the country. By such attention to the influence of seasons of peculiar severity, upon vegetation, much good may arise in awakening an inquiry as to the application of some preventive means, so that the fruit trees, the more delicate species of the fruit bearing shrubbery, and vegetable family generally, may be preserved. Our correspondent asks for directions to protect his fig bushes from being cut down by the frost. We know of nothing more effectual than covering them with plaited straw, or matting, and putting round the roots a warm bed of long stable manure.

Brinkneville, Halifax Co. N. C.

April 30, 1835.

To the Editor of the Farmer & Gardener:

SIR: The results of elections and those causes which may have led to them are generally viewed with deep interest; but why not with greater interest, the effects or results of those changes produced by uncommon seasons on the vegetable world,—that world which is, in fact, the foundation of human sustenance? If more of the consequences of seasons too wet or too dry; or of weather very hot or very cold, in different places, were detailed in agricultural periodicals or elsewhere, it might be attended with important advantages. As knowledge is power, especially in agricultural pursuits; so such results as above named would greatly tend to guard against the injurious effects of similar vicissitudes, or even, in some cases, to turn them into benefit.

The severity of the past winter here, (and in many other parts of North America as stated in public accounts,) is without a recollected parallel: and it would appear that the injury done to dormant vegetation has been correspondently great. I hope I will not incur the censure of egotism when I take for example, as injuries done in this corner of the union, those with which I am most familiar, viz. the loss my own little plantation has

sustained. To begin with *grape vines*. Different kinds endured the winter's severity well, with the following exceptions. Some Malaga vines, raised from the seed of Malaga grapes, which were but little injured other winters, were killed to the ground or entirely destroyed. English vines greatly injured or totally killed. So the French, and some of my Scuppernongs (a vine remarkable for hardihood) were killed to the ground. They were small ones, which had been trimmed in the early part of winter, and warm weather soon thereafter ensuing, they bled profusely; for I observe around their trunks a black crust, occasioned by bleeding and freezing, which being removed, is accompanied by the bark. The large Scuppernongs, and those not having bled freely, are uninjured. The injured have generally sprouted again from near the ground; how much they will be eventually injured or retarded in growth, if at all, I am unable to say, either from my own experience, or that of others. *Isabellas*, *Catawbas*, *Madeiras*, &c. were even less damaged than the common bunch grape vines, of spontaneous growth here: for the last named, in some cases, had the ends of their branches killed.

I proceed to trees. My new *Chinese Mulberries*, [the *Morus Multicaulis*] endured the severe frosts very well. The only injury is, that the top ends of some branches have been killed. Not so another kind of tree from the "sublime empire," called here the China tree, or *Pride of China*. If all in America have been so rudely treated by last winter's frosts as the few I had, we may have to send across the ocean for a new supply. I have been credibly informed their destruction is general in this part of our country.

The severe freezings in February, together with a warm spell of weather in January, destroyed all our *plumbs* and most of our *peaches* in the *germ*. My fig bushes have to take a new start from the ground. This however is not very uncommon for this bush with me. By the by, I should like to see, in the "Farmer & Gardener" some directions for effectually protecting these valuable bushes from being destroyed, or cut down by severe cold. As to garden vegetables, the destruction of many usually exposed with impunity, was general, such as collards and cabbages, commonly left out during the winter in this mild climate, with their roots covered with earth and heads turned towards the south. So also the young plants of the forenamed vegetables, from seed sown in the fall for early spring transplanting.

Yours, &c.

SIDNEY WELLER.

[From the Horticultural Register.]

BEST MODE OF DESTROYING CATERPILLARS.

MR. FESSENDEN.—Is there not some misapprehension in the communication of Mr. Ives in the American Gardener's Magazine, relative to the Garden and Orchard Caterpillar? Can he mean by that insect, the scourge of our apple trees, and of our wild cherry trees, for the destruction of which Col. Pickering's judicious instrument was intended? If so, the habits of the insect in Essex and in Norfolk are essentially different. I have been familiar with this insect for forty years, and never in a single instance, did I discover its eggs covered by a leaf; with me, it deposits eggs in the autumn, at the extremity of the last year's

shoots, surrounding the whole shoot, and protected simply by a varnish. This varnish reflected by the rays of the sun enables you to detect it in winter and spring. It is not a new discovery, that the proper time of dislodging them is before they are developed. The suggestion was made twenty years since by John Prince, Esq., and I have been in the constant practice of destroying them before the month of May.

I observe that the *Pitmaston white cluster grape* has risen in England to the rank which it deserves, Mr. Andrew Thompson and Loudon having recommended it to the public as among the *first seven* for cultivation in the open air in England. I shall be able this year to prove its value, both for *external* cultivation and for *early* and *late forcing*, and in the interim I shall be able to supply all who may be disposed to try it.

JOHN LOWELL.

The *Pitmaston White Cluster* is a seedling, grown in Yorkshire, hardy, prolific, and producing berries as large as those of the *Golden Chasselas*. Of its originality there can be no question. Its distinctive characters are as well marked as those which distinguish a melon from a squash.

Remarks by T. G. F.—We are under great obligation to the highly respected author of the above communication, and solicit the continuance of similar favors.

The insect which Mr. Ives in the Gardener's Magazine denominates the "Moth of the orchard, or garden caterpillar," and represents as having been found on "trees speckled with occasional dead leaves, adhering to the branches so firmly as to require considerable force to dislodge them," does not exactly coincide with that which is thus described by Dr. T. W. Harris in a discourse delivered before the Mass. Hort. Soc. "The caterpillars of the apple tree, which are hatched from those *curious ring like clusters of eggs surrounding young twigs*, are, as you well know, furnished with jaws, and devour the leaves of this tree. They have also sixteen legs, and in crawling from leaf to leaf, and branch to branch, spin from their lips a delicate thread, which is a clue to conduct them back to the shelter of their many-coated, silken tents. From the first to the middle of June they descend from the trees, and seclude themselves in various hiding places. Each one then weaves round its body a small silken shroud or cocoon, fills the meshes with a yellowish powder, slips off and packs in one end of its old coat, and appears in a new form, that of a brown chrysalis, or pupa devoid of prominent legs and wings. Sixteen days afterwards the pupa skin is rent, a moth* issues from it, ejects from its mouth a quantity of liquid matter to soften the end of its cocoon, and then forces its way out. In the moth state it is furnished with a very short tongue, and subsists only on the honey and dew of plants."

Not only John Prince, Esq., but many others have urged the expediency of attacking orchard caterpillars in the egg-state. A number of writers for the N. E. Farmer, have, from time to time, advised that mode of effecting their destruction. Among others, "*A Farmer*" says, "Now is the time [August] to destroy caterpillars. The eggs, from which they are produced are now to

* *Bombyx castrensis*. L.

be found in bunches on the twigs of fruit trees. By taking off these bunches, the vermin are now destroyed in the egg. The color of the bunches is now so much darker than the bark of the twig that they are easily found; it will, by degrees, become lighter, until it will be very nearly the color of the bark. The eggs are laid in July. They remain where laid, unaffected by any change of weather, by frost or heat until spring, when they are hatched by the flowing of the sap, and the vegetative power of the twig. Each bunch of eggs will produce a swarm of caterpillars that will have a nest by themselves. The nest is usually built on the branch that bore the twig on which the eggs were laid.

As caterpillars have no disposition to leave the tree, on which they were hatched, until the time when they leave their nest and separate to come together no more, it is very easy to keep small trees from the nests by destroying the eggs.

I found the first week in July this year, [1831,] that many bunches of eggs were then laid on my peach trees, and small apple trees. I have since taken from those trees more than five times the number of bunches of eggs that I have ever before seen on such trees in one year. If in other places such quantities of eggs are laid as were on my trees, and they be not destroyed before hatching, the caterpillars, next spring, will eat all before them, in spite of all opposition.

Mr. Francis Richardson, of Chelmsford, Mass., asserts that "The only effectual way to extirpate caterpillars that I ever found, is to find the eggs, and destroy them, which may be easily done," &c. Thatcher's Orchardist likewise observes, "The eggs from which caterpillars are produced, are attached in clusters to the small twigs by a brownish colored muller in the month of August, and are securely covered with a gummy substance, unsusceptible of injury by the weather during winter," &c. Indeed it has long been known that the easiest and most effectual way of getting rid of caterpillars is to destroy their eggs. This fact, however, though known and practised on by individuals, is not perhaps sufficiently diffused to induce all the benefits which might result from its being more frequently repeated in publications devoted to the interests of cultivators.

It is possible that the caterpillars of Mr. Ives, is the insect, which Dr. Harris has described in the following article.

"The autumnal caterpillar, or, as it is commonly called, *web-worm*, has made its appearance in great numbers. Not only our forest and ornamental trees, but our fruit trees are disfigured with their webs. The eggs are deposited on the extremity of a branch. The young larvæ, when hatched (which happens from the last of June till the middle of August, some broods being early, others late,) cover the upper surface of the leaf with a web, beneath which they feed in company, devouring only the upper cuticle and parenchyma of the leaf, leaving the lower cuticle and nervures untouched. As they increase in size, they progressively extend their web downwards, till, eventually, it covers a large portion of the branch," &c. Here, it seems the web of the insect covers the upper surface of the leaf instead of the leaf's covering the eggs of the insect. We shall therefore not venture to assert that the web-worm and caterpillar of Mr. Ives are identical, but

as they both appear to be *weavers*, it is not improbable that they are both of the same species.

MARYLAND HORTICULTURAL SOCIETY.

SATURDAY, May 16, 1835.

The following articles were exhibited:—

By Mr. Thomas Dixon, gardener to Mrs. Donnell, a fine Cauliflower.

By Mr. Thomas Kehoe, gardener to Col. B. C. Howard, a very fine Cauliflower, measuring 9½ inches diameter and 28 7-8 inches circumference, the naked head.

By Mr. Welhelms, gardener to Mr. Ridgely, of Hampton, 2 cauliflowers, half a peck of snap beans, cucumbers, &c.

By Mr. Stronelle, a very fine bunch of asparagus.

The weekly premium was awarded to Mr. Thos. Dixon for his cauliflower.

The season has been very unfavorable for cauliflowers, as well as other vegetables, and hence our products have not equalled those of last year. GIDEON B. SMITH, Cor. Sec'y.

THE BREEDER & MANAGER.

Cows.—There is a vast difference in cows as regards the quality of their milk, as also the quantity which they yield daily to the farmer, or others who possess them. This every one knows who has given the subject that attention necessary to enable him to judge correctly. There is also a difference in the quality of butter made from different cows—some cows will yield pale, *whapish* butter, while others will produce that which is of a rich deep yellow, and altogether of a superior flavor and quality. Now to ascertain this, the milk of each cow should be set apart, not mixed with other cow's milk, and the cream churned separately, and then the different qualities of butter can be accurately ascertained. Something, however, depends on the cool, airy situations where milk is set, as also the state of the atmosphere. If the weather is "muggy," cream will not rise so well as when the air is pure, or the wind northerly or westwardly.

Various ways are adduced to ascertain the goodness of the milk of cows. The best and most simple is as follows:

Take a glass tumbler of any size from half a pint upward—paste from the top downward a strip of white paper from one eighth to a quarter of an inch in width. Then with a pair of compasses or dividers, space it off into half inch distances—divide these distances with a pen of ink into quarters, eighths and sixteenths,—which, for the want of a better term you may call "degrees." This done, take the fresh milk of a *prime* cow,—(one known to be such)—and fill the tumbler to any degree marked on the paper—only remember the degree for future use—and set it away for any number of hours in a cool place, and the cream on the top may be seen through the glass as also the number of degrees of its thickness,—which should be noted down for future use. Then take the milk of another cow and fill the tumbler to the same degree as was previously done—set it by in the same place, the same number of hours, in a similar atmosphere, and the difference, if any, will be perceived by the thickness of the

cream standing against the degrees marked on the paper as aforesaid.

By graduating a number of tumblers of the same size and *shape*, the goodness of the milk of any number of cows can be tested at one time, by observing the above rules; which will be full as correct, as different days will produce a difference in the thickness of cream. In this way the milk of heifers can be tested; and the certainty or not whether they will make good cows can be easily known. Some dairy people procure graduated glasses on purpose to test the quality of milk from different cows. This would be better if people had them—but as they have not, the above simple method is within the reach and capacity of any one to put in practice.

MISCELLANEOUS.

PROPERTIES OF SUGAR.

The following on the uses and virtues of sugar, is rendered doubly interesting by the historical incidents which the learned author has so ingeniously wove into his article.

Dutrone calls sugar the most perfect alimentary substance in nature, and the testimony of many physicians establishes the fact. Dr. Rush, of Philadelphia, says, in common with all who have analyzed it, that "sugar affords the greatest quantity of nourishment in a given quantity of matter, of any subject of nature." Used alone it has fattened horses and cattle in St. Domingo, for a period of several months, during the time when the exportation of sugar and the importation of grain were suspended from the want of ships.

The plentiful use of sugar in diet, is one of the best preventives that ever has been discovered of the diseases which are produced by worms. Nature seems to have implanted a love for this aliment in all children, as if it were on purpose to defend them from those diseases.

Sir John Pringle tells us that the plague was never known to visit any country where sugar composes a material part of the diet of the inhabitants. Would it not be salutary in cholera?

Dr. Rush, Dr. Cullen, and many other physicians are of opinion that the frequency of malignant fevers of all kinds has been lessened by the use of sugar. Dr. Rush observes, that in disorders of the breast, sugar is the basis of many agreeable remedies, and it is useful in weakness, and acrid defluxion in other parts of the body.

The celebrated Tronchin, recommended "Eau Sucre" for almost every malady. Dr. Fothergill was very anxious that the price of sugar should be sufficiently moderate to render it accessible to the mass of the people. From experiments made by some eminent French surgeons, it appears to be an anti-scorbutic, and this is confirmed by well known facts.

Although sugar has for so long a time been used in our alimentary preparations, it is only since it has been analyzed by the French chemists, that it has become to be considered in itself an alimentary substance. The base of sugar is a glutinous matter, which, in its proper combination, is extremely pure and perfectly soluble, and consequently in the most favorable circumstance for easy digestion. It is therefore extremely

wholesome and nutritious. Of this there is abundant proof. During the crop time in the West Indies, all is fat and flourishing; the cattle which are fed on the cane tops and the scummings, become sleek, and in better condition, although more worked at that time than at any other. The negroes drink freely of the juice, and the sickly among them revive and become fat and healthy. In China and India the same beneficial effects are recorded. We are told by Sir George Staunton that in the former country, many of the slaves and idle persons are frequently missing about the time that the canes become ripe, hiding themselves, and living entirely in the plantations.

A writer from India observes, "That comfort and health arising to a poor family from a small patch of sugar cane, exclusively of what the jagry may sell for, can only be known to such as may have observed them in the time of cutting the canes, and noted the difference in their looks before the crop begins, and a month or six weeks after."

The Cochin Chinese consume a great quantity of sugar; they eat it generally with their rice, which is the ordinary breakfast of people of all ages and stations. A wholesome and pleasant food.

There is little else to be obtained in all the inns of the country but rice and sugar; it is the common nourishment of travellers. The Cochin Chinese not only preserve in sugar all the fruits, but even the greater part of their leguminous vegetables, gourds, cucumbers, radishes, artichokes, the grain of the Lotus, and the thick fleshy leaves of the aloe. They fancy nothing is so nourishing as sugar. This opinion of its fattening properties, has occasioned a whimsical law. The body guard of the king, selected for the purpose of pomp, are allowed a sum of money with which they must buy sugar canes, and they are compelled by law to eat a certain quantity daily. This is to preserve the *en bon point* and good looks of those soldiers who are honored by approaching so near to the person of the king; and they certainly do honor to their masters by their handsome appearance. There are about five hundred of them equally sleek and plump, being actually fattened by sugar. Domestic animals, horses, buffaloes, elephants, are all fattened with sugar cane in Cochin China.

Sugar has been found to be an antidote to the poison of verdigris, if taken speedily and in abundance; and, unlike many other organic substances, its nutritious qualities are not liable to change from the operations of time or season.

Porter on the Sugar.

RECIPES.

FOR THE TOILET.

Cold cream pomatum for the complexion.—Take an ounce of oil of sweet almonds, and half a drachm each, of white wax and spermaceti, with a little balm. Melt these ingredients in a glazed pipkin, over hot ashes, and pour the solution into a marble mortar; stir it with the pestle until it becomes smooth and cold, then add gradually an ounce of rose water; stir all the mixture till incorporated to resemble cream. This pomatum renders the skin at once supple and smooth. To prevent marks from the small pox, add a little powder of

saffron. The pot in which it is kept should have a bladder tied over it.

Pearl water for the face—Put half a pound of best Spanish oil soap,* scraped very fine, into a gallon of boiling water; stir it well for some time; when cold add a quart of rectified spirits of wine, half an ounce of oil of rosemary, the juice of half a dozen lemons (or if they are not convenient $\frac{1}{2}$ lb. of crem. tartar,) and 2oz. borax. It is an excellent cosmetic for removing freckles and tan from the face, and for improving the complexion. Without the two last ingredients, where there are no freckles to remove, it will be found a most pleasant beautifier of the skin, imparting to it both smoothness and freshness.

*By best Spanish oil soap, is meant the genuine castile soap, which comes in oblong square wedges of about half a pound in weight. Ed. F. & G.

Orange flower paste for the hands—Blanch 5 or 6 lbs. of bitter almonds, by boiling in water, then beat them very fine in a marble mortar, with 2 lbs. of orange flowers. If the paste be too oily, add to it some bean flower, finely sifted, but let no water enter the composition.

To make the teeth white—A mixture of honey with the purest charcoal will prove an admirable cleanser.

CULINARY.

Mock Turtle Soup—Scald a calf's head with the skin on, and take off the horny part, which cut into two-inch square pieces: clean and dry them well in a cloth, and put them into a stew pan, with 4 quarts of water made as follows: take 6 or 7lb. of beef, a calf's foot, a shank of ham, an onion, 2 carrots, a turnip, a head of celery, some cloves and whole pepper, a bunch of sweet herbs, a little lemon peel, and a few truffles. Put these into 8 quarts of water and stew them gently till the liquid is reduced one half; then strain off, and put it into the stew-pan with the horny parts of the calf's head; add some knotted marjorum, savory, thyme, parsley chopped small, with some mace pounded, a little cayenne pepper, some green onions, a shallot cut fine, a few chopped mushrooms, and a half a pint of Madeira wine. Stew these gently till the soup is reduced to two quarts, then heat a little broth, mix some flour, smoothing it with the yolks of 2 eggs, and stir it over a gentle fire till it is near boiling. Add this to the soup; keep stirring as you pour it in, and continue stewing for another hour. When done, squeeze in the juice of half a lemon, half an orange, and throw in some boiled force meat balls; serve it up hot. This is deliciously gratifying and nutritive.

Sauce Piquant—Put 1 oz. of butter with two sliced onions into a stew pan, with a carrot, a parsnip, a little thyme, laurel, basil, two cloves, two shallots, a clove of garlic, and some parsley; turn the whole over the fire until it be well coloured; then shake in some flour, and moisten it with some broth, and a spoonful of vinegar. Let it boil over a slow fire; skim and strain it through a sieve. Season it with salt and pepper, and serve it with any dish required to be heightened in flavor.

Roasting Ear Fritters—Grate the corn from off 15 ears of young and tender corn, with a large grater; mix two eggs and a table spoonful of flour; beat the whole well up together: should the corn not be young and milky add a spoonful or two of cream, or new milk. Fry in a swimming and hot

pan, and you will have one of the most delicious dishes which can be brought to the table.

To purify Water—Put a tea-spoonful of alum finely powdered, or dissolved in a small quantity of hot water, into four gallons of river, or other muddy water, stir it well, and then let it remain a short time, and all the impurities will settle to the bottom, and it will be nearly as fresh and clear as spring water. Put four or five drops of sulphuric acid (oil of vitriol) into a decanter of impure water, it will cause the noxious particles to deposit themselves, and render the water wholesome.

WE HAVE LIVED AND LOVED TOGETHER.

We have lived and loved together,
Through many changing years;
We have shared each other's gladness,
And wept each other's tears.
I have never known a sorrow,
That was not unsoothed by thee;
For thy smile can make a summer,
Where darkness else would be.
Like the leaves that fall around us,
In autumn's fading hours,
Are the traitor's smiles that darken
When the clouds of sorrow lowers;
And, through many such we've known, love,
Too prone, alas! to range,
We both can speak of one, love,
Whom time could never change.
We have lived and loved together,
Through many changing years;
We have shared each other's gladness,
And wept each other's tears.
And let us hope the future,
As the past has been, will be;
I share with thee thy sorrows,
And thou thy smiles with me.

DOMESTIC SUMMARY.

The northern stage in passing over Culpepper's bridge, between Halifax and Louisburg, North Carolina, on the 9th inst., was upset. Several of the passengers were seriously injured. One had his back broken, and cannot survive. The driver was in a dying state, and two or three of the horses were either killed or drowned.

Mr. Reynolds, agent for the Pennsylvania College, at Gettysburg, is soliciting donations to raise funds for the erection of a suitable edifice, establishment of professorships, and for the purchase of a library and apparatus. We wish him every possible success, and sincerely hope that his exertions may secure to the institution the necessary funds, to accomplish every object within its desires; for we are among those who view the diffusion of learning among the people, as one of the surest means to perpetuate the blessings of our free institutions.

The citizens of Winchester, Va., are petitioning the council of that city, for authority to extend the Winchester and Potomac rail road through the streets of that place.

Notes of a less denomination than five dollars, are prohibited from being circulated in the state of Alabama, after the 1st of June, under a penalty of twenty dollars.

A survey is now being made of the route of a rail road from Nashville to New Orleans.

The current price of beef, mutton and veal, on the 9th inst. at Mobile, Alabama, was 25 cents per lb.

Funds have been placed in the Hagerstown bank, for the payment of the Chesapeake and Ohio Canal scrip, with interest, which will be paid on demand.

The collision between the state of Ohio and the territory of Michigan, is suspended for the present, and until the action of the Legislature of the former, which meets on the 8th of June to consider the matters in dispute. We most fervently hope that wisdom and peace may influence its councils, and that justice may be satisfied without further violence.

The town of New Ark, New Jersey, has a population of 18,000 persons; it manufactures and exports annually \$7,650,000 worth of various articles.

A fire broke out in the woods about five miles northeast of Bridgeton, N. J., a few days since, and spread over a thousand acres of land, consuming every thing in its course.

The Mayor of Mobile has addressed a communication to the city council of that place, calling their attention to the subject of facilitating the intercourse between North and South Alabama, by the means of a rail road. He recommends that the city of Mobile be pledged to subscribe for one million of dollars of the stock.

The cholera has again made its appearance on the Mississippi. Three cases were reported by the board of Health, of Natchez on the 24th ultimo. The New Orleans paper of the 7th inst. report from 15 to 25 cases as having occurred the previous day in that city. It is also at Memphis, Tenn.

The Kennebeck, (Me.) Journal, says that a vein of coal has been discovered in that town. If the bed should prove to be of any extent, it will be immensely valuable as fuel is both scarce and dear in that quarter.

There have been destructive fires both at Boston and New York, the one at the first named place is the most so ever known there. The loss at each place is between fifty and sixty thousand dollars.

The National Convention which met in this city on the 20th inst. closed its session on Friday, 22d inst., having previously nominated the Hon. Martin Van Buren as a candidate for the presidency, and the Hon. Richard M. Johnson, for the vice presidency.

Van Dieman's land is said to contain 31,500 souls—of this number 11,745 are convicts—no doubt a very, very shrewd population.

There was a death at Milledgeville, Georgia, on the 2d instant, by Small Pox.

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American Silk Hosiery—Agricultural Societies in Indiana—Agricultural bounties—Calculation of probable produce of an acre of corn—Fruit prospects—Early fruit and vegetables—Soils and ploughing—The chenopodium quinoa—Culture of the Ruta Baga—The prospects of the crop—Wool—Removal of a grape—Effects of the last winter on vegetation—best mode of destroying Caterpillars—Maryland Horticultural Society's proceedings—Cows, the quality of milk and mode of testing—Properties of sugar—Recipes for the Toilet—as cold cream to improve the complexion—pearl water to remove freckles—orange flower paste for the hands—a dentifrice to whiten the teeth—Culinary—to make turtle soup—sauce piquant—roasting ear fritters—to purify water—We have lived and loved together—Domestic Summary—Cure for the whooping cough—How to take off grease spots from clothing—prices current, &c.—Advertisements.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,	bushel.	2 50	
CATTLE, on the hoof,	100lbs.	7 50	8 00
Slaughtered,	"		
CORN, yellow,	bushel.	83	84
White,	sales	87	
COTTON, Virginia,	pound.	17½	18
North Carolina,	"		
Upland,	"	18½	20
FEATHERS,	pound.	35	37
FLAXSEED,	bushel.	1 37½	1 50
FLOUR—Best white wheat family, ..	barrel.	7 25	7 75
Do. do. baker's,	"	6 75	7 25
Do. do. Superfine,	"	6 00	6 25
Super Howard street,	"	6 00	6 12
" wagon price,	"	5 87	6 00
City Mills, extra,	"		6 25
Do.	"		
Susquehannah,	"	6 00	
Rye,	"	4 62½	4 75
GRASS SEEDS, red Clover,	bushel.	5 00	5 25
Timothy (herds of the north) ..	"	2 50	3 00
Orchard,	"	none	
Tall meadow Oat,	"	2 00	2 50
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.	18 00	20 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
HOGS, on the hoof,	100lb.	6 00	6 75
Slaughtered,	"		
HOPS—first sort,	pound.	12	20
second,	"	10	
refuse,	"	8	
LIME,	bushel.	33	35
MUSTARD SEED, Domestic,	"	5 00	6 00
OATS,	"	49	50
PEAS, red eye,	bushel.		
Black eye,	"		1 25
Lady,	"		
PLASTER PARIS, in the stone,	ton.		3 12½
Ground,	barrel.	1 37	
PALMA CHRISTA BEAN,	bushel.	2 00	
RAGS,	pound.	3	4
RYE,	bushel.	90	92
Susquehannah,	"	90	95
TOBACCO, crop, common,	100 lbs	3 75	5 00
" brown and red,	"	5 00	7 00
" fine red,	"	7 00	9 00
" wrappery, suitable	"		
for segars,	"	6 00	12 00
" yellow and red,	"	8 00	12 00
" yellow,	"	9 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	4 00	5 00
" ground leaf,	"	5 00	9 00
Virginia,	"	5 00	10 00
Rappahannock,	"		
Kentucky,	"	6 00	9 00
WHEAT, white,	bushel.	1 32	1 38
Red,	"	1 28	1 30
WHISKEY, 1st pf. in bbls.	gallon.	37	38
" in hhds.	"	37	38
" wagon price,	"	33	
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 25	
To Wheeling,	"	1 50	
WOOL, Prime & Saxon Fleeces, ..	pound.	62 to 75	26 to 28
Full Merino,	"	52	62 24 26
Three fourths Merino,	"	45	52 23 24
One half do.	"	40	45 23 24
Common & one fourth Meri. ..	"	35	40 22 24
Pulled,	"	35	38 23 26

BAKEWELL SHEEP.

INQUIRIES have been made of the editor of this paper at what prices a moderate number of Bakewell sheep, of pure blood and approved forms can be procured for. Persons having such to dispose of, will please address the editor by letter post paid, stating price, age and number, which they may be willing to sell. The sheep to be delivered in Baltimore. may 19

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.		
BACON, hams, new,	pound.	11½	
Shoulders,	"	9½	9½
Middleings,	"	9½	
BUTTER, printed, in lbs. & half lbs. ..	"	31	37½
Roll,	"	25	28
CIDER,	barrel.		
CALVES, three to six weeks old, ..	each.	3 00	6 00
COWS, new milch,	"	17 00	30 00
Dry,	"	8 00	12 00
CORN MEAL, for family use,	100lbs.	1 80	1 85
CHOP RYE,	"	1 87	1 94
EGGS,	dozen.		12
FISH, Shad,	barrel.	7 25	
Herrings, salted, No. 1,	"	4 25	4 50
Mackerel, No. 1,	"	7 25	
Cod, salted,	cwt.	2 25	2 75
LAMBS, alive,	each.		
Slaughtered,	quart'r		
LARD,	pound.	9	10
ONIONS,	bushel.		100
POULTRY, FOWLS,	dozen.		
Ducks,	"		
POTATOES, Irish,	bushel.	62½	87½
Sweet,	"	1 25	1 50
TURNIPS,	"		
VEAL, fore quarters,	pound.		
Hind do.	"		

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	U. S. Bank,	par	VIRGINIA.
Branch at Baltimore,	do		Farmers Bank of Virginia, 2a
Other Branches,	do		Bank of Virginia,
MARYLAND.			Branch at Fredericksburg do
Banks in Baltimore,	par		Petersburg,
Hagerstown,	1a		Norfolk,
Frederick,	do		Winchester,
Westminster,	do		Lynchburg,
Farmers' Bank of Mary'd,	do		Danville,
Do. payable at Easton,	do		Bank of the Valley,
Salisbury,	uncertain		Branch at Romney,
Cumberland,	2a		Do. Charlestown,
Millington,	do		Do. Leesburg,
DISTRICT.			Wheeling Banks,
Washington,			Ohio Banks, generally 3a3½
Georgetown,	Banks, 1.		New Jersey Banks gen. 1½a2
Alexandria,			New York City,
PENNSYLVANIA.			New York State,
Philadelphia,	1a		Massachusetts,
Chambersburg,	2a		Connecticut,
Gettysburg,	do		New Hampshire,
Pittsburg,	1½a2		Maine,
York,	2a		Rhode Island,
Other Pennsylvania Bks. 1½a2			North Carolina,
Delaware [under \$5],	3a4		South Carolina,
Do. [over \$5],	2a1		Georgia,
Michigan Banks,	5a		New Orleans,
Canadian do.	5a		

ADVERTISEMENTS

BUFFALO BERRY TREE.

SINCE it was ascertained that this tree is dioecious (the male and female being distinct trees) we have hesitated to send it when ordered, because our trees are too young yet for their sex to be developed. Under these circumstances we propose to furnish single trees (the sex being unknown) on the following terms:—Trees less than two feet in height at 50 cents each, and those above two feet at 75 cents a piece. When their sex shall have been ascertained we will furnish either male or female trees at \$1.25 each, and at \$2 per pair. By this arrangement time may be gained by taking young trees this spring and putting them out, relying on the future for mates for them, and nothing can be lost in point of price of them. We have a few from 1½ to 3 feet high, which we will put up to order on the terms above stated.

SINCLAIR & MOORE.

March 31, 1835.

THE GENTLEMAN'S VADE MECUM;
OR, THE SPORTING AND DRAMATIC COMPANION.

UNRIVALLED ATTRACTION!

THIS DAY, the 2d of May, this widely-spread journal is embellished with several beautiful engravings, and its contents afford an abundant and spicy variety, unequalled by any other number which has been published since its commencement.

—The principal Engravings are—

A perfect profile of the celebrated race-horse Touchstone and his rider—the winner of the great St. Leger Stakes at Doncaster, (Eng.) in 1834. This plate, coloured sells for five dollars at the print stores in Philadelphia. A View of the Procession which took place at Stratford upon Avon, (Eng.) a few years ago, in commemoration of the Anniversary of the Birth-day of the immortal bard, Shakespeare.

CONTENTS.

Extracts from Fanny Kemble's Journal—just published.

Official statement of the Races at Trenton, N. J.

A graphic description of the celebrated Foot Race on Long Island, for \$1,300; which was won by Stannard on Friday week.

Statement of a shooting match between the Philadelphia and Harrisburg marksmen for \$1000.

A record of the winnings of the celebrated English racer Touchstone.

Shakespeare's Festivals, or a New Comedy of Errors, an interesting drama, never before published in this country.

The Soldier's Tear, a favourite ballad, set to music.

A column or more of English Paragraphs from the Satirist, World of Fashion, and Bell's Life in London.

In addition to which, there is a diversified quantity of original and selected articles connected with the Drama and the Turf, and other subjects which will be found amusing and instructive.

The GENTLEMAN'S VADE MECUM is published on very white paper of extra imperial size, every Saturday, at three dollars per annum, payable invariably in advance.

The above may be considered a fair criterion to judge of the manner this highly popular paper is conducted.

Address SMITH & ALEXANDER, Athenian Buildings, Franklin Place, Philadelphia.

Subscribers out of the city will have no difficulty in receiving this journal regularly, as particular attention is observed in mailing the papers for distant post-offices.

OFFICE OF THE

PHILADELPHIA GENTLEMAN'S VADE MECUM.

The Modern Acting Drama contains all the Plays and Farces published in the Gentleman's Vade Mecum.—There are many of our subscribers we know who are desirous of preserving them. Those who wish to procure this work, and thereby secure the dramatic portion of the paper complete, will do well to forward their names at once, as there are but few copies of the Modern Acting Drama remaining on hand. The terms, &c. are explained in the advertisement in this day's paper.

A PREMIUM.—Any person forwarding a 10 dollar note to the publishers (postage paid) will be entitled to 4 copies of the Gentleman's Vade Mecum or the Modern Acting Drama, either all of one or part of each, as they may request, and they will be forwarded according to their direction for one year. In addition to which they will also be presented with a copy of the Novelist's Magazine, containing the productions of several of the best writers of the present day.

Address C. Alexander, Athenian Buildings, Franklin Place, Philadelphia. may 26 1t

RICE MEAL.

FOR sale a few kegs (containing 40lbs) of nicely manufactured rice meal, a delicious and wholesome article. Apply to SINCLAIR & MOORE, Light street. May 19

FOR SALE,

A BROOD MARE about 15 hands high, color black, fine form and action. Apply at this office. May 5th.

Printed by Sands & Neilson, corner of Calvert and Market streets.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 5.

BALTIMORE, MD. JUNE 2, 1835.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, JUNE 2, 1835.

RENOVATION OF ASPARAGUS BEDS—Inquiries having been submitted to us, asking information on the above subject, we have made the selections of remedies from several works, which will be found on another page, under the head of "*Asparagus*," and sincerely hope that some of them may be found on trial to answer the desired purpose. From the number of complaints that have reached us, we presume the falling off in the quality of this excellent vegetable, in private gardens, is pretty general—a remedial means is, therefore, an object of the more importance; and should any of those we have pointed out prove efficacious, we should be happy to be favored with a report by any gentleman who may try either of them, describing the character of the improvement wrought, and effect produced; together with such other remarks and observations as may suggest themselves as being proper to be made.

The best method of raising early vegetables is to be careful to select seeds of early kinds. A warm situation should be selected for planting them in, and the vegetation of the seeds can be greatly promoted by soaking them a day or two in warm water and soot, and then rolling them in plaster.

We are pleased to learn that professor *Wm. B. Rogers*, of William & Mary College, Virginia, has been appointed by the Board of Public Works, to make the necessary reconnoissance, with a view to obtain a knowledge of the general geological features of that state, its chemical composition, minerals, mineral waters, &c.

Such examinations by men of science and observation, are eminently calculated to develop the hidden treasures of a state, and render tributary to the uses of man,—and to none more than to the agriculturist,—countless resources which otherwise would have remained unknown and unproductive. The recent geological and topogra-

phical survey in our own state, has brought to light numerous facts connected with her resources, which will ultimately prove of immense benefit, in enhancing the value of landed estates, and placing the means within the reach of proprietors on tide water, of resuscitating their exhausted fields.

The Baltimore Market is fully supplied with green peas and strawberries, at prices so moderate as to be within the reach of almost every one.

We hope that agriculturists will not permit the opportunity to pass by unimproved, of sowing beets, carrots and parsnips. Now is the time to lay the foundation of a plentiful supply of root vegetables for winter. They should lose no time, too, in planting their fall potatoes. The prospect of a deficient wheat crop, renders attention to this part of husbandry absolutely necessary.

WINTERING SHEEP—It is recommended by a writer in the *Genesee Farmer*, to sow Oats to be cut before they are quite ripe to be fed out to sheep through the winter; this he has found to be the cheapest and best method to winter sheep, of many ways he has tried. The sheep will eat them clean, straw and all, and they thus get grain enough to keep them in good condition. He affirms that among his sheep, fed in this way, he has never had a distempered one. Two good sheaves per day, on an average, will serve twenty sheep through the winter; some days three sheaves, and some but one.

NEW INVENTIONS.

A Newly Invented Cultivator.—A letter to the editors of the *National Intelligencer*, dated Mount Carmel, (Illinois,) May 14, 1835, gives the following description of a newly invented machine, called the Cultivator.

"By way of conclusion, permit me to tell you, that the Yankees are undone! A *Kentuckian* has invented and brought to this place, a machine called "*A Cultivator*," to be employed in our prairies, which is now undergoing a thorough trial, and answers admirably. It ploughs, drops, (plants,) covers, and smooths the rows after the corn is planted, and harrows the ground at the same time. After planting is over, the plough is taken off, and the harrow is employed to cultivate the corn, and hill it. The same department of the machine which is attached to the harrow, and covers the corn, is then employed in hilling it. When this process is over, then the plough is

attached to a stock, and ploughs the centre of the rows, having mould boards, throwing the earth both sides. When this is over, the harrow is employed again, by dispensing with the hilling department. Several machines have been manufactured here, and distributed through the prairies of the Upper Wabash, and give general satisfaction. Two horses and a boy can do the work of six or eight hands. The original machine has been prepared for planting, and tending cotton in the same way, and sent to Georgia with that view.

By a postscript the writer observes that, "except as to dropping, the machine, he thinks, can be employed in the cultivation of the sugar cane, and the inventor is of opinion that it can be arranged so as to plant potatoes, beans, &c. just as well as corn."

Should this machine answer the purposes of its construction, it will produce as great a revolution in agricultural pursuits, as did the cotton gin, and tend to diffuse its benefits more generally, as there will scarcely be a branch of husbandry, in which human labor will not be materially lessened, the cost decreased, and consequently the profits of agriculture greatly enhanced. But whilst we are always highly gratified to notice the march of the arts in its conquests over mere physical force, we are bound in candor to say, that we invariably make all the allowances for the zeal of inventors, when we read of the triumphant results of their geniuses; for the weakness which induces one to see nothing but perfection in his own works, is a feeling bearing so close an affinity to virtue, as to be almost identical with it, and hence it is, that prudence would dictate that a judgment less partial than that of their paternity, should be called upon to decide on the merits of inventions intended for public benefit, and we know of no tribunal which can be so fully trusted, as that very public itself.

THRASHING MACHINE.—*Wm. Loughton*, of Portsmouth, New Hampshire, has invented a thrashing machine, which is represented as both simple and competent to do its work cheaply and well. These are qualities much called for in all labor saving machinery, and never fail to recommend to public favor all machines which do intrinsically possess them. Many thrashing machines have already been invented—some of them have been found to answer a most valuable purpose, and have received a ready and extensive patronage; but there is still room for others, and especially, if by the simplicity of their construction, reduced friction and lessened abrasion, should be gained.

THE FARMER.

POTATOES.

American Hotel, Baltimore, May 19, 1835.

Having an errand in the office of the editor of the *Farmer & Gardener*, I had handed me, the 1st No. of the 2d vol., containing an essay of Mr. A. K. Barnum, of Vermont, on the culture of potatoes, which the editor recommended as being worthy of my particular perusal: accordingly I read it, with some attention.

Perceiving the writer to be a theorist, one who aimed at creating an excitement, and that he had contradicted himself; and knowing from my own experience, that his piddling mode, as he has been pleased to call it, is deviating from known and well established practice, and fearing that if permitted to go without refutation from some one, it would be liable to lead many an innocent farmer astray from the true principles of the culture of this valuable vegetable, to their damage, as well as prove a loss to the community, after a more careful perusal, I gave the editor my opinion in full, that the author was not a practical farmer, and that very many profitable remarks could be, and ought to be, made, in order that people should not be misguided.

The editor insisting on my communicating my objections in writing on the subject, I consented, on the ground that he should be connected in my remarks with the author, he having given his opinion strongly in favour of his principles of culture and still persisting therein.

In the culture of the potato, it is necessary to know the nature of it, with respect to its growth, what are its elements, and what its constitution; that is, what it will bear without injury, it being a most delicate root, and what mode of culture is necessary to ensure the most desirable and abundant crop.

I have found by experience, that the potato is not particular as to its choice of soils, or its usage as to manure. It will thrive well on high and on low grounds, in ordinary seasons, if there be no extremity of wet or drought during their growing, and will generally produce a reasonable and satisfactory crop, entirely without manure, but are sure always to repay for extra attention.

The potato above any other vegetable is found profitable to cultivate on new rough ground, among stones and roots, where the ground cannot be sufficiently worked for any other crop usually cultivated, until time and labor renders it more pliable. Here the farmer is greatly benefited in the culture of this crop, as the potato is more peculiarly adapted to rough, half cultivated, grounds than any other crop, and the cultivation, by the more frequently working of the ground, tends to the better subduing of it. The farmers to the north, besides bringing their rough lands to, avail themselves of the certainty of escaping from the evil of the ravages of the worms that so often destroy a crop of corn, by first planting their new swarded ground with potatoes, and it is well to observe, that this swarded ground is far the best for a crop of potatoes. We generally plant to the north ground newly broke up, once with potatoes, and once with corn, and then sow it down to grass and grain.

This mode of culture is of well known and uni-

form practice. As much ground as a farmer wishes to till is taken up yearly, that is by two years planting it, and managed in this way. Thus it becomes necessary to plant as many acres of potatoes at least as the farmer wishes to take up yearly, for the benefit of stirring his land, and keeping it loose, by distributing his manure in proportion to the land required to be taken up for the benefit of his grass, as well as a proper system of tillage.—In this mode of husbandry he does not use the line, clear out his walks, nor shovel over his land into beds; but he has use for all his manure for the benefit of his three crops, and to fit the ground for grass. On Mr. Barnum's system, it will take all the manure a very economical, industrious farmer can possibly procure on a considerable farm, to manure one acre, for he recommends spreading and manuring high, the first coat to plough in, then to drill, 20 inches apart with a plough, not less wide to be sure than 8 to 12 inches, and 4 deep, and in those furrows 2 inches thick, the first coat requires from 25 to 50 bushel cart loads, the latter will require 50, aggregate 75, this will take all the manure of a good farm. He says there is great benefit to be derived in this mode of using manure from the coming crop. Well may his neighbours say let him piddle with his line, &c.

But above all his deviations from rational farming, is his providing heaps of different kinds of earth, from different situations, near where he plants, to hill his potatoes with; this it seems is not intended as manure, but merely for hilling, as though there was not earth enough: if this last process was to benefit as manure, according to his theory, all the worth of it would soon be evaporated; again, there will be an abundance of weeds and grass, and every foul kind of vegetation before the potatoes are as large as he hills them, which would form a complete turf, and be almost as high as the potatoes; how are these disposed of? We hoe them as soon as they appear, when the potatoes are but a few inches high, or we are punished for longer neglect: how does Mr. B. lay his weeds? they are by his plan sure to get quite large, and very numerous, by the time potatoes are budded.

This doctrine is contrary to all usage, in all my acquaintance in my own state, N. Hampshire, N. Y. and Pennsylvania, where I have lived and farmed it. By the time potatoes are budded for bloom, if nothing be done from planting to that period, a little dirt or compost around the potatoes, would avail nothing towards a crop, it would serve to nurse and nurture the weeds only, and would not benefit the potatoes at all. But if this compost or dirt is used as manure, why not spread and harrow it in, immediately, before the virtue escapes by evaporation; for much of the virtue of manure passes off in this way in a few hours exposure to sun. In his first manuring he is anxious to prevent this effect; but I would ask what becomes of his economy of his manure in the latter application, it being exposed for months to the influence of sun and rain? I conclude, therefore, that Mr. B. is inconsistent with himself.

Notwithstanding the potato will bear poor and indifferent treatment, and produce a crop on any soil, rich or poor, high or low, and with but slight care and attention, (I do not mean not to hoe them at all) it is nevertheless, the most delicate of all plants cultivated. It suffers sorely

from the least changes of weather, that is from wet to dry, or from heat to cold, and soon yields to frost. A little too much wet when first planted will cause them to rot in the ground, and if up, a slight inundation will cause them to wilt and die; and if a change from cool and wet to warm and dry, they are much affected, and from dry and warm, to sudden wet, they are also much affected, especially at a time when near maturing, when they are sure to give up; and this is the cause that potatoes are so often not good, having failed to become matured; and let me remind the farmer that all vegetables, at this stage, are in their most delicate state. This is the time too when we are in danger of our grain blighting, and the time it is most frequently blighted, if at all, from sudden heavy rains; and from these causes we had not half a crop of potatoes in N. Hampshire the last season, and those but half the usual size. The potato is easily cultivated as I have shown; and they will well repay for good usage, both in manure and good hoeing. I would as soon slight my corn as my potatoes. Mr. B. recommends planting potatoes four inches deep; my experience teaches me the contrary. If I plant low ground, I plough my ground in beds, in a direction for the water to drain off, then harrow lengthwise of the furrows, and the small lands; having a number of these, side and side, I take a light sharp horse harrow, and harrow cross-wise of the beds, which pulverizes the ground, and fits it well for planting, leaving a small space between the rows, which answers two purposes, one for a guide for the rows for dropping; this is done by dropping in the middle of the tracks of the harrow, which is easily and correctly performed, by any small boy. It also serves completely to fill up all cracks or holes, the seed lying fair and easy. I then drop my manure directly over the seed potatoes, and when covered up, the seed is safe from inundation, by being some inches above the surrounding surface: the seed lies warm under this manure, the rains drain into the middle furrows. Thus I do not lose a hill when those that hole four to six inches for the hill even on common high ground, lose much of their planting.

Another great advantage is derived from this mode of planting, above the great increase of yield, it prepares the ground for a crop of grass.

There are other great advantages from this mode of culture: I plant about 3 feet distance, it takes the most of the surface that is pulverized to cover the potatoes, and by the time they are twice well hoed, my hills are as I want them to be.—They naturally rise high above the surface in form of a sugar loaf; this hill is to turn off heavy rains, and it naturally keeps the potatoes from being too moist, as they are often injured thereby. In harvesting, I find a great advantage in the manure being above the level; the hills being peaked, render them very easy to harvest, and the manure is advantageously mixed with this loose surface over all the ground, taking care to harvest each row by itself, hauling the mixed loam and manure in one direction. This mode gives a rich surface over all the ground, and with a little harrowing, it becomes as smooth as an onion bed: by improving this opportunity it availeth much.—This ground is sown in grass, if I choose, in the fall, if early, and it is fitted to sow conveniently in

the spring, on the snow, if I choose, or otherwise. This mode of planting potatoes for the benefit of grass, is I think preferable to Mr. B's mode.

I have obtained what I call very large crops in this way, say one of the most favourable dry seasons, on some portions of the best of the piece, from five to seven hundred bushels per acre, but no average like this. But the influence that the different seasons have on this kind of ground is very great on the crop. Some cold wet seasons, as above, the potatoes on the same kind of ground, have hardly been worth harvesting. I have ascertained in my latitude, $42\frac{1}{2}$, when at home, that potatoes yield best planted shallow, that is, if manured in the hole, to drop them on top of the manure, instead of under; they have thus in some cases, produced double the quantity of those planted under it, in the same kind of holes, made side and side. It is most safe to make the hills as peaked as they can be, conveniently, to cast off the water in heavy rains. It is certain, from experience and observation, that potatoes are more often affected from a superabundance of wet than by drought, and in an average of seasons, therefore, it is wise to guard against the greatest evils. It is not generally known that potatoes hold out and grow best if they lay dry in hills; on the contrary, if the hill be wet through, and continue to be kept wet, it so affects them as to cause a dropping of the leaves, which is called the rust, and they will continue faltering without the possibility of a remedy, in any subsequent stage whatever, if but half grown, as to the root.

Mr. B. prescribes a rule for planting potatoes; I cannot, myself, venture on so invidious a task as to fix a definite rule in a case where its propriety is to be determined by contingencies. The season and soil are so variable, that they render a general rule somewhat imperfect. But I will say, for strong moist ground, well manured, seed high for a large crop: sometimes we may seed too high on quick land, if it be a dry season. But the distance the hills are to be apart is a consideration. I have found that 3 feet each way is the most proper distance to ensure a good crop, and potatoes of a handsome size, for table use, &c.

Taking this for the distance on the rich prepared ground, as I have described, three common sized potatoes to the hill will be more profitable than any less quantity. It is no use to cut them on such ground. If they should be cut small, the vines come up small and weak, grow fast and fall down, and on such ground the vines will run over the ground and keep green till harvest. I have often found some few ripe, and some in the same hill small and green, and generally very ill shaped, whereas on the same ground with the same culture, seed high with good sized potatoes, planted at the same time, they come up strong and are sure to stand erect, will shoot out their young at the same time, and will grow near of a size, ripen altogether, one or two months earlier, and will be found of suitable size for table; this is the mode that I recommend to obtain the largest crop and far the best potatoes. I have tried every method, even the piddling method of Mr. B. as to distance; it ruins them for a crop, to sow them in the way he has described, and much more in the size.

I once tried an English mode warmly recom-

mended to produce 900 bushels to the acre: it was to prepare the ground and drill 2 feet apart, and plant the seed lengthwise, the potatoes in contact with each other. They were well attended; the result of the crop was as any agriculturist would judge, there was after the rate of 900 bushels found on the acre, but the time of finding them was not at harvest, it was when I planted; they produced nothing worth harvesting.

It is observable that Mr. B. speaks of the importance of sun and air in his first mode, as described, as though they were the principal causes operating to produce his large crop, when in his latter method he produced his largest crop, though he precluded sun, air and light, from entering into his beds. Where they are sown but one foot apart, if they grow at all, there will be a bed of vines, and if they are kept clear of weeds, as they must be to produce any potatoes; and here too, he omits the great essential of hilling, and yet he gets the largest crop without this very essential and heavy work of hilling, with at least two hundred loads of compost manure to make his hills with: did there ever before, such a wild notion enter any man's brains as to think of hilling potatoes in this way; and can any agriculturist suppose there ever was a good potato produced in this unnatural method. I will also notice his expressions, that are still wilder: he says he did not mean to be understood that 1,800 bushels could be raised by field culture, but now says that eight hundred to 1,200 can be raised upon a single acre, easier than half that crop on four acres, and with less expense. This account implies that he had asserted that 1800 bush. could be grown on an acre, and he surely meant in his new mode of culture. Why does the writer cringe and keep back what he pretends he has done, or said? Not one bushel does he assert, in positive terms, that he has ever raised in any mode of culture; and there is all the reason in the world to suppose that he never did raise a bushel by any culture whatever. But why does he hope to be spared from the shafts of the critic? Because this is a dream of his, and he has by relating it in this public manner, caused the excitement that he tells of—an excitement extending even to the four corners of the world?—and now he is afraid that he will be questioned on the subject, and dreads lest he should be asked if he ever raised one bushel of potatoes in his manner of culture. I will observe another grand mistake of his, which every practical farmer will readily detect him in,—that potatoes planted in neighboring fields of different varieties, are so fond of each other, male and female, and their connection is such that in sending off their farina to each other, by the aid of soft breezes, they lose their caste, and become impure—and this he states is the cause that they so often degenerate.

It is certain that every practical farmer very well knows, they never degenerate by crossing in the least, even if they are planted together in the same hill. It must have been corn that he had heard of mixing from such causes, and I apprehend, being quite unacquainted with the potato and its culture, he has confounded one plant with the other.

The gentleman to be sure, has stated some important facts, with respect to the manner of harvesting potatoes so as to preserve their quali-

ties long. There is great propriety, as he says, in harvesting them with but little exposure to sun and air; and his manner of binning and turfing them over tight, is highly proper; but I cannot see why the spade or shovel, that the turf is cut add handled with, would not do to beat it down with, instead of a wooden mall. I would rather and what I have said heretofore on the subject, that is, that the sun and air soon generate a poisonous action in the potatoes; so much so, that it is well known that many a noble animal fed on them have died; this has taken place where potatoes have lain in out buildings exposed to the air for a long time, and the animals have been constantly fed on them. The same potatoes, if cooked and eaten by men, would be sure to give them a degree of sickness, if not unto death. If we determine to have good potatoes and to keep them so, they should be harvested by night, or in a cool overcast damp day, and picked up immediately after the hoe, and kept close in a body, entirely excluded from air, and go into the cellar as moist as they came from the hill, and the more moist dirt adhering to them the better. These potatoes will not vegetate the next season to injure them any before the next crop. There is another remark of the writer's, which has much correctness in it, that is, that the potato thrives best within the latitudes described by him, and that they grow to greater perfection, and are there of a better quality. This, no doubt, he has been well informed of. This essay would be lengthened quite too long, were I to enter into a minute detail of each objection I have: my desire has been to correct erroneous principles so that farmers should not be misled to their injury.

I will only add, that the distance I have chosen for my hills, is derived from my experience in the culture of potatoes. At this distance, they have a good share of sun, air and light; they also have good space for roots, and strength of ground, so that they will mature a good crop, and if seeded well with whole potatoes, or good sized pieces, they will be found of good and even size for table use, and well ripened in good time, in ordinary seasons.

Varying from this rule, in planting the common large field potato at a greater distance, it tends to an inconvenience in hoeing, as to an easy way of hoeing, over all the ground, and dividing and making a proper light peaked hill, which renders them easily harvested. If on the other hand the distance be reduced, an inconvenience is experienced in hoeing, and shaping of the hill, and an interference in the growth, is very perceptible; the size being reduced in proportion to the distance. In seeding the potatoes, they should be placed close together in the hills, by which means they are easier worked, give more room for sun and air between the hills, and are more readily gathered when ripe in the fall.

ABEDNEGO ROBINSON,
of Portsmouth, New Hampshire.

P. S. I will further observe, that although the potato of different varieties are so near alike, yet it is a fact that the sun and atmosphere vary in their effects upon different varieties; proving poisonous to many kinds, the white, most of all of them; yet there are some of the coloured varieties that those elements have a salubrious effect upon.

on the long red potato; is much improved by spreading them open to sun and air for a few days, especially in the spring. They will become a little wilted and dried, but are nevertheless rendered very pure for eating, and in my humble opinion far preferable to any within my knowledge. There are some other coloured ones that will bear sun, but will not improve like those named.

While on this subject, it will be but justice to the state of Maine to remark, that while I have been visiting the middle and southern states, I have observed that all the principal cities, and villages, seem to be almost wholly supplied with the best large potatoes from that quarter. Those most highly esteemed are called here the *Mercer*, in New Hampshire they call them *Shenangoes*. This variety sells uniformly for 25 cents a bushel above all other varieties. Notwithstanding the abundance exported from Maine during and since the last fall, her supply seems still unexhausted; which circumstance alone must satisfy every one of the adaptation of that state to the culture of this greatest vegetable friend of man, and of the productive quality of her lands. I must be indulged in the remark, that it is enough to astonish any person to behold the quantity, size, and beauty, of the potatoes, which we see daily carted and drayed through the streets of the southern cities—and which readily find a market at from a dollar to a dollar and a quarter per bushel.*

*This estimate of value, is entirely too high—the wholesale price of eastern potatoes, during the fall, when they are brought to market, ranges, as in quality, from forty to sixty cents per bushel. We presume our correspondent must have allusion to the *retail price* in the markets, and not to any sales in quantity. *Mercers* in the early part of the spring were high, and probably by *retail*, in the markets, brought the maximum price as named.

PREPARING GREENSWARD.

The following is a part of letter from Horace Wilder, of North Dixmont, to the editor of the *Maine Farmer*. The success of the practice is encouraging.

"In the spring of 1834, I prepared 70 rods of ground in the following manner:—The ground had been well laid down and mowed seven years. About 20 loads of manure, mostly from the barn windows, were carried and spread on the grass.—On the 22d of May, the ground was ploughed about six inches deep, and turned over flat; it was then rolled with a heavy roller till it had the appearance of an onion bed. Five loads of a mixture of hay manure, chip manure, and leached ashes, were then spread evenly over the surface and harrowed lengthwise of the furrows. It was planted with corn, potatoes, ruta бага and white beans, and produced as follows:—Corn, 12 bushels; potatoes, 40 bushels; turnips, 50 bushels; beans, 1 bushel. I have not stirred the ground since the crop was taken off—choosing that the manure should remain covered till the next spring, when I intend to apply a dressing of fresh manure, and plough it and plant it with corn. I consider the above method of preparing greensward for planting, as far preferable to the usual practice of breaking up in the fall, and cross-ploughing in the spring. Ground that is broken up in the fall

does not get rotted by the next spring—it is then harrowed and cross-ploughed and harrowed again; by this time the sods are nearly all upon the top and exposed to the hot drying sun, where they are tumbled about by the horse-plough and the hoe through the whole summer, and afford no nourishment to the crop; but by letting the land lie till you are ready to plant, the grass gets a good start, and that and the manure being turned under together, and closely compacted by the roller, is preserved from the action of the sun and rains, ferments quickly, and affords a beautiful supply of food for the crop."

THE GARDENER.

ASPARAGUS.

Dr. J. W. Smith, in a communication to the *American Farmer* some years since, gives the following simple process to renovate old beds of this delicate vegetable:

Take finely pulverized oyster shells and incorporate them with the earth in which the asparagus is planted; and dig it well in about the roots in the old beds. Its effects are astonishing—in fact regenerating them."

Mr. J. Wells, of Massachusetts, gives the following:

"The management of the bed (asparagus) may be given in a very few words. In the fall of the year, it is important to cover it with horse manure—in the spring it should be raked off, and the beds lightly forked over so as not to touch the roots.

If the bed from frequent weeding becomes low, it may be raised with dock mud to advantage. This produces no weeds, while the saline particles are favorable to its growth. When this cannot be had, any rich loam may be taken."

The flooding of Asparagus beds during the winter is well spoken of in the *Gardener's Magazine*.

The *Horticultural Register* contains the following abstract from an article contained in the *Memoirs of the Caledonian Horticultural Society*, on the subject of renovating asparagus beds:

Mr. Robertson says, in the year 1813, he found his asparagus beds very much exhausted, by reason of the ground being too coarse and poor, and shoots having been too severely cut in former years. Having a quantity of furnace ashes which had lain for some years, he had them sifted, and mixed with a small portion of vegetable earth, formed from tree leaves. This compost was allowed to lie about two months, and at the latter end of the month of October he commenced top-dressing, by taking off the old soil to about the depth of from six to nine inches, at least as deep as could be got without injuring the plants. The above compost was then laid on so as to cover the crowns of the plants, about four inches deep. On the approach of winter, the bed was covered with stable dung, to prevent their being injured; and frequently, during winter, he poured as much of the drainings of the dunghill as could be collected; and by using these means, the shoots, says Mr. Robertson, have been the best in size, quantity and quality, that he ever beheld.

The following recipe is given for making a compost for top-dressing:

One-fourth sandy peat moss, from a dry heath;
One-fourth furnace ashes, well sifted;
One-fourth vegetable mould formed from tree leaves;

One-fourth well rotted stable dung, with a small portion of quicklime. The whole well mixed together.

In giving the above, the editor of the *Southern Agriculturist* says:

"A friend informed us that he had for many years, when dressing his Asparagus beds, removed all the soil, until he reached the crown of the plants, (taking care, however, not to injure the buds); manure was then applied to the plants, which thus received the full benefit. The soil was then replaced, and nothing more was done, except to loosen it with the fork in the spring. He had by this method, renovated several old beds, which had become efficient in keeping them in good condition."

The editor of the *Southern Agriculturist* thinks the mode of planting Asparagus is erroneous—that it is planted too deep—the finest he ever saw, was not more than three inches below the soil.

The following compost would form a most excellent top-dressing:

$\frac{1}{2}$ half-rotted tanner's bark;
 $\frac{1}{4}$ leached ashes;
 $\frac{1}{8}$ vegetable mould;
 $\frac{1}{8}$ leaves;
 $\frac{1}{16}$ quick lime;
 $\frac{1}{16}$ stable manure;

The whole to be thoroughly stirred and incorporated together, and suffered to mellow a few weeks before being used.

THE PORTUGUESE MODE OF CULTIVATING ONIONS—They must first be raised on a nursery bed, in the warmest and most sheltered part of the garden. The bed should be highly manured in the fall, dug up so as to cover in the manure, and left, unsmoothed, to the mellowing influence of the frost, until as early in the month of February as the season will permit; then rake the bed and sow your seed in drills, taking care to drop the seed about an inch apart, cover them about half an inch deep with rich loam and leached ashes, equal parts of each. As soon as the plants are strong enough to bear removal, that is to say, when they are about the thickness of a goose quill, let some *puddle* be prepared with garden mould and water, with a small proportion of soot; the whole to be of the consistence of thick cream: as the plants are drawn from the seed-bed, let their roots be instantly immersed in the puddle, and there remain until they are transplanted, where they are permanently to continue. The plants should be set out about six inches apart, and the rows twelve inches wide. *The ground should be kept perfectly clear of weeds, and regularly refreshed with water in hot and dry weather.* On this latter circumstance will very much depend their size and mildness; to this is owing the superiority of onions grown in Portugal, which are all cultivated in the way here recommended. By keeping the roots in puddle, if it were only for a few minutes, dur-

ing the interval between the taking up and transplanting, they are prevented from receiving the slightest check from the access of the atmospheric air, and will require no immediate watering when first transplanted, though if several days of dry weather should follow, watering will be found essential.

The bed into which these onion plants are permanently transplanted should be a good rich loamy soil, perfectly friable, and its natural properties should be improved by being well manured with equal portions of stable manure, leached ashes, and street dirt, or vegetable mould from the woods. The whole to be well mixed, and the bed dug at least a spade and a half deep, to be well pulverized and raked before planting. This process is easy, and will invariably secure a large crop of excellent onions. It should be recollected that the *mild flavor* and *large size*, which distinguish the onions of Portugal and Spain, are imparted to them mainly by *watering*.

GARDEN WORK FOR JUNE.

[From Bridgman's Gardener's Assistant.]

The principal sowing season for general crops may be considered as past; but there are many kinds of seeds which may be sown this month, and the gardener should ascertain the success of his former plantings, in order to make up any deficiencies from failures, before the season be too far advanced. By this time, some of the early crops will be cleared off, and such ground as was manured for the early crops of *Lettuce*, *Radishes*, *Spinach*, &c. will be excellent for *Beets* and *Carrots*. Hoe and thin out all standing crops, and vacant ground, to prevent weeds from running to seed. If the ground be dry, frequent hoeing will be beneficial. Use means to destroy insects. Plant kidney Beans, and Beet seeds. If the seedling plants of Broccoli, Cauliflower, Cabbage, &c. failed last month, sow again early this month. Water the beds frequently, and sow tobacco dust, soot, ashes, &c. or use a liquid composed of an infusion of waste tobacco, lime, soot, cow-dung, elder, and burdock leaves. Transplant Cabbage, Celler, &c. for summer use; sow Carrot seed in drills; plant Cucumber Seed in hills; sow Endive seed; transplant Leeks; plant Peas, soaking them first five or six hours in water; plant potatoes; pumpkin seed; sow black Radish seed, and sow Ruta Baga. As the herbs come into flower they should be cut on a dry day, and spread in a shady place to dry for winter use. Conduct hop vines to the poles, and when they have reached the top, nip off the ends to strengthen the stems. Give frequent watering to the flower beds; cut down dead flower stalks, remove decayed plants, and replace them with vigorous ones from the nursery bed. Transplant annual flower plants into the regular beds. Trees or espaliers now require attention: cut off such superfluous shoots as are not required to be trained in, leaving well placed middle sized shoots to supply the place of any old branches that may be thought necessary to cut away. *Grape Vines* should be looked over every week—cut off all the tendrils and useless young shoots before the bunches of fruit. Train up the shoots for bearing next season, and to a proper length before you stop them.

A GOOD STEEP FOR GARDEN SEED—Steep your seeds for two hours in a pint of warm water, in which is infused 1 oz. of saltpetre; then dry the seed and add currier's oil sufficient to wet the whole, after which mix it with plaster of paris, so as to separate and render it fit for sowing.

HOW TO DESTROY INSECTS—Worms, maggots, snails, or slugs, may be driven away by sowing salt or lime in the spring, in the proportion of from two to three bushels per acre, or by watering the soil occasionally with salt and water, to the quantity of two quarts of salt to four gallons of water.

HOW TO SOW SEED IN DRY WEATHER—Garden seeds, sown in dry weather, should always be previously soaked in a solution of sulphur.

MARYLAND HORTICULTURAL SOCIETY.

SATURDAY, May 30, 1835.

The following articles were exhibited:—

By Mr. Edward Doran, two very fine early York Cabbages, and two bunches very fine long scarlet Radishes.

By Mr. Henry Schroeder, a dwarf Cherry Tree with ripe fruit.

By Mr. Robert A. Taylor, a plant in flower, of the *Hermania excisa*.

By Mr. Samuel Feast, 40 varieties of Roses, consisting of the *Harrisonia*, or yellow Scotch, (a splendid new rose of a pure gamboge yellow), *Henry Clay*, *Gigantea*, white *Multiflora*, *Sarmetosa*, and other fine varieties, *Pelargonium Pansies*, *Mimulus Smithii*, &c.

By Mr. John Feast, 40 varieties of *Pelargoniums*, *Rosa Smithii*, or yellow *Noisett*, (a very rare and fine variety), 4 varieties of *Azaleas*, *alium molis*, *Rhododendron ponticum*, *justicea nova*, &c.

By Mr. Gideon B. Smith, *Cypripedium parviflorum* and *flavum*.

At twelve o'clock the committee of the whole awarded the weekly premium to Mr. Edward Doran, for his early York Cabbages and Radishes.

GIDEON B. SMITH, Cor. Sec'y.

THE BREEDER & MANAGER.

We should be pleased if some of our readers possessing the requisite information, would favor us with a reply to the subjoined extract from a letter from one of our subscribers:

Alleghany County, Md. May 23, 1835.

To the editor of the Farmer & Gardener.

SIR—Owning considerable mountain land, which I believe could be advantageously to myself appropriated to sheep husbandry, I would respectfully inquire through your columns, of some one acquainted with the subject, what breed would be best adapted to an extensive establishment for growing wool. My object would be to select such breed as would combine produce of fleece with goodness of meat, so that when they had performed their office of wool-bearing, and were falling into the sear and yellow leaf, they might, by the intrinsic excellence of their mutton, command a passport, at good prices, to the shambles of the butcher and the tables of the epicure. I do not know whether I have expressed myself so as to be understood; but I should feel grateful if some gentleman would give me such advice as he would follow himself under similar circumstan-

ces. I want to employ my mountain lands in growing wool, selling sheep—and to make money by the operation—that being my object, I hope there will be no difficulty at getting at my meaning. Respectfully, yours,

IMPORTANT FACTS TO BE OBSERVED IN REARING STOCK.

Under the above caption, the New England Farmer of the 13th May, has a communication from a correspondent who signs himself "B. C.," on the subject of breeding of animals. It is a very interesting notice of the experiments of M. Giron. The laws which are laid down as regulating the *form* and *sex* of animals are new, and if founded on correct principles, highly important, and should be known to every one engaged in the business of husbandry. Any farmer of intelligence and observation, will be able to test the soundness of M. Giron's theory, and as it is unattended with any extra expense, it is to be hoped that some gentlemen will be sufficiently interested in its novelty—if they should not be believers in its ingenuity and soundness—to submit it to the proper scrutiny. The animal and vegetable worlds have their peculiar laws, and are governed by their own appropriate rules, and although the experiments detailed in the work of M. Giron, may not be sufficient to establish those which govern in the transmission of qualities to the issue of animals, yet their results, as far as they go, are calculated to elicit attention from all engaged in the pursuits of agriculture; and under that belief we give the following extract from the paper in question:

"M. Giron de Busareingues, is an agriculturist in the south of France. His work contains two separate propositions, supported by experiments most numerous and satisfactory. The first is—that in animals of mature age and perfect development, the influence of the sexes on the external form *crosses* in generation, the male being more like the dam, and the female progeny more like the sire. The second is—that in regard to sex itself, the influence is *direct*, the sex of the progeny corresponding with that of the parent which had the strongest constitution, and was in soundest health at the time of union.

The first of these propositions is deduced from an observation of a vast number of cases which cannot be detailed in this brief notice. After remarking then that they are sufficiently strong to convince every one of the correctness of the inference, I will proceed to state a few facts by which his second proposition is supported by M. Giron.

His first remark was, that, in his flocks and studs, those females who were at the most vigorous age, generally produced females whether united to strong or weak subjects: whilst those females that had either not attained, or had passed the prime of life, produced males when united to prime subjects, and females, when united to very

old males. To ascertain whether this discovery corresponded with general observation among practical farmers, M. G. made inquiries of the neighboring agriculturists, who informed him that they had constantly remarked that when the male was young, and the female vigorous, the product of their union was female; while the contrary had as uniformly happened when the conditions were reversed.

In order to test this matter still further, M. G. announced, in 1825, to the agricultural meeting of Severac, that a part of his flock, already marked, would give him, at the next *agnelage*, more females than males. The society nominated two commissioners to ascertain the fact, and it turned out that the proportion of males to females was 1000 to 1472.

At a subsequent meeting M. G. offered to effect the production of a majority of males or females in a given flock, at the choice of the society. Two flocks were immediately furnished by members of the society.

The first flock was divided into two equal parts without reference to age or constitution. The first part being supplied with very young rams gave a product of 30 males to 76 females: the second part being supplied with strong and vigorous rams 4 or 5 years old, gave a product of 55 males to 31 females.

The second flock was also divided into two sections, but with more regard to the other conditions referred to. The first section composed of strong sheep 4 or 5 years old, was sent into rich pasture and visited by yearling rams; it produced 15 males and 25 females. The second section, composed of feeble sheep under 4 and over 5 years of age, was placed in dry pasturage, and received two strong rams over 3 years old; the result was 26 males and 14 females. In both experiments it was observed that the lambs produced by the young rams were equal in appearance to those produced by the most vigorous.

The experiments were continued on other classes of animals, birds and insects, with the same results. In the poultry yard, e. g. where the preponderance of maturity and vigor was on the part of the hen, there resulted 725 males and 1000 females: and where the male parent was most vigorous and of ripest age, there resulted 1415 males and 1000 females. Among horses his experiments were particularly clear and conclusive.

It happened to be most profitable to M. G. to have more females than males. With a view to this effect he took care, in the year 1824, to furnish his mares good pasturage, and to give none to foal who had suckled the same year or borne the year previous. "Elles ne furent presentees a l'etalon qu'apres qu'elles eurent donne des signes de chaleur." Five mares, thus prepared, produced five females; and of fifteen foals procured from 1824 to 1827 there were 13 females and two males. In accordance with the same law, it is generally true, I believe, that southern horses (particularly Arabian) produce most female colts when united to the more vigorous mares of a northern clime.

So far as M. G. extends his comments to the human race, they are not within the design of this brief communication, which is intended for the practical benefits of farmers. This benefit may

be easily and plainly deducible from the above statements so far as they relate to horses and poultry. Permit me to allude to the manner in which advantage may be taken of both *propositions* in rearing *horned cattle*.

Suppose you have a cow that is a remarkable milker, and wish to procure from her a progeny with the same excellence. Now the common way is, to send the cow to bull, and if she has a *heifer* calf, it is raised with high expectations, and the owner is invariably disappointed. The reason of this is, as we now see, that the *heifer* calf partakes of the external form and peculiar properties of the *bull* and not of the cow. Proceeding then on the principle developed by M. G. we should do as follows: send the cow whose properties you value to a bull of the ripest age and greatest vigor. The product will be a *bull-calf* having the form and inherent properties of the mother, so far modified in their *developments* as the difference of sex required, but still inherently the same. This *bull-calf* should be carefully reared, and his *female* progeny will exhibit the form and properties of his *dam*.

So also if you have a bull of huge size, fine form, great strength, and other excellencies, it will be in vain to expect similar form and properties in his immediate male progeny. But his *heifer-calves* will inherit his properties, and transmit them to their male progeny. Thus must we be content to pass through one generation, and we shall probably be well rewarded for our patience and perseverance.

It is scarcely necessary to add that such patience is not necessary in rearing horses. If you wish to procure a colt of form and properties of a fine mare, send her to a vigorous horse, and the result will probably be a *male*, possessing the properties and form of the dam. On the other hand, if you wish a colt's resembling a celebrated stud horse, you must send such a mare (either old or very young) as will be most likely to have, from this union, a female foal, for it is in this crossing of sexes we get the external form and properties we desire.

In conclusion allow me to express the opinion that the incredulity that exists among farmers about the possibility of propagating the qualities of animals, may arise from their want of knowledge of these laws. "I don't believe in your breeds of horses," says Farmer A. "There's my neighbor B. has as fine an animal as ever stepped, that came of his old black mare that's not worth a pin." Now if Farmer A. had known as much as I wish to teach him by this paper, the fact he stated would not have led him to his skeptical conclusion. If the fine young animal was a female, it matters little what were the qualities of the "old black mare," the foal partook of the form and qualities of the sire, and so on.

ON SOWS DESTROYING THEIR OFFSPRING.—Some suppose that they crave animal food, and that the mischief may be prevented by giving them salt pork or refuse meat; but many ridicule this notion. The cause of such unnatural conduct is said to be costiveness, which produces irritability and phrenzy; to prevent which give the sow for some weeks before weaning, a heaping table spoon-

ful of flour of brimstone each week in her food—a few raw potatoes will aid the brimstone. Sows that run at large are not apt to destroy their pigs; then they choose their food, as grass, &c. One writer observes that confinement produces an unnatural appetite, and should be prevented by feeding with potatoes, turnips and other roots.—The sow should be put into a pen by herself some weeks before farrowing, and supplied with litter so that none be given for a week before that time.

ON OPENING AND DISTENDING THE MILK VESSELS OF COWS.—In the northern countries of England, their cows are so managed that they calve when the grass is abundant.* By this means it is supposed that the milk vessels of the cows are opened, so that they become ever after good milkers; which is now the case, unless nature is early made to have a tendency to that species of secretion.—*Yankee Farmer*.

*[Could not the same effect be produced by feeding the cows for some weeks before calving, if there should be no grass, or full supplies of slop and vegetables?]

FOREIGN ABSTRACT.

FRANCE.—Since our last paper, an arrival at New York brings London and Liverpool papers to the 25th April, both inclusive.

The question on the bill for the payment of the American indemnity was finally taken in the French Chamber of Deputies on the 18th April, when the following was the result: for the bill 289, against it 137, majority 152.

Prior to the passage of the bill, M. Bignon's proposition to appropriate but one half of the amount of the indemnities as fixed by the treaty, and to open a negotiation for the remaining half, was negatived by the following vote: for his proposition 156, against it 270, majority against it 114.

Other amendments were proposed—one by M. Legrand, to the effect "that the sum of 25,000,000 francs shall not be paid until France has received satisfactory explanations on the part of the American Government relative to the President's message;" another, that "the money to be paid to America shall be included in the budget, and paid without interest, in six separate payments;" both of which were rejected by decisive majorities. An amendment was, however, adopted on motion of General Valage, requiring that the money shall not be paid until France obtains a satisfactory explanation from the President for the language used in his message to Congress in December last. This last amendment will, we presume, present no serious difficulty, because the very message of the President, which contains the objectionable paragraph, also has an explicit disclaimer of all intention of menace: hence all embarrassment as to explanation is wisely provided against.

Great Britain and Ireland.—The new cabinet had been formed, and consists of the following persons:—Lord Melbourne, first Lord of the Treasury; Lord Landsdowne, President of the Council; Lord Auckland, first Lord of the Admiralty; Lord Holland, Chancellor of the Duchy of Lancaster; Lord Duncannon, Woods, Works and

Privy Seal; Lord John Russell, Home Secretary; Lord Palmerston, Foreign Secretary; Mr. Charles Grant, Colonial Secretary; Sir G. Hobhouse, India Board; Lord Howick, Secretary of War; Mr. Poulet Thompson, Board of Trade; Mr. Spring Rice, Chancellor of the Exchange. The above are the *members of the Cabinet proper*, and it is said to be a stronger one than it was thought possible for Lord Melbourne to have formed. Earl Mulgrave is appointed Lord Lieut. of Ireland, in place of Lord Haddington; Lord Plunkett, Lord Chancellor, and Viscount Morpeth, Chief Secretary.

Ireland presents a continuous scene of disturbance and riot—the tithe sales of property are only permitted to go on under the strong arm of large bodies of the police and military, and popular discontent is ever ready to break out in violence on the slightest occasion. Such is the hatred entertained against the police officers, that they dare scarcely show themselves even for the preservation of order.

Spain is still disturbed by the revolutionists, and the cause of the queen is far from being as triumphant as it was expected it would be when Mina took command of the army.

In Portugal, the death of the queen's late consort, Prince Augustus, has given rise to considerable excitement. He died suddenly, it will be recollected, and it is alleged by some that he was poisoned by the Duke of Palmella, who is very unpopular, with a view of marrying the queen to his son. His residence, in Lisbon, was beset by a mob who threatened vengeance against him. The Duke of Terceira, however soon appeased them by his manly conduct. He went into the midst of the mob unarmed, and caused them to retire. The Prince was buried on the 31st March, and his death has awakened the liveliest sympathy in the bosoms of the Portuguese. On his death bed, it is said he requested his queen to marry his younger brother, Maximilian, now in his 17th year. The capital remained tranquil at the last advices, as did also the provinces. The people evince great loyalty towards the queen, and are anxious for her marrying again—and she, doubtless, to show her *gratitude* to her loving subjects, will seriously incline to gratify them.

THE MARKETS.

Liverpool, April 24.—Cotton Market—The transactions in cotton continue to be extensive, speculators and exporters have bought freely, the former taking 9000 bales of American, 1300 Surat, 300 Pernams and 400 Bahias, and the latter 2500 American, 1100 Surat, 110 Bengals, and 50 Smyrnas. The market is steady for American descriptions, without improvement in prices, save for good and prime qualities, which are rather dearer.

Liverpool, April 23.—Our cotton market sustains the advance in prices of 3-8, as noticed in our's dated 16th April, and with a large business doing. Uplands, 9 $\frac{3}{4}$ a 12 $\frac{1}{4}$; Orleans, 9 $\frac{3}{4}$ a 14 $\frac{1}{2}$; Mobile, 9 $\frac{3}{4}$ a 13d. Tobacco—There has been very little doing in Leaf, particularly in good, the sales are chiefly stemmed, to manufacturers. No change in prices.

24th—Our prices this day are the same as at the close of last week, but the common qualities are rather more freely offered.

Our present stock amounts to 143,500 bales against 108,000 last year.

Total Stock 166,600 bales against 153,000 last year.

23d—Turpentine in consequence of very large arrivals, and an indifferent state of the trade, has declined considerably. The last sale was made at 11s 3d per cwt., and we fear it will go materially lower, as the supply coming is very large.

23d—Turpentine has again declined, 2500 bbls. having been sold at 10s 10d down to 10s 7d, per cwt.

London, April 24.—Cotton—The purchasers of cotton by private contract this week are all at the extreme prices of the market. By public sales this forenoon 2392 bags Surats, 554 Madras went off with great animation at $\frac{1}{4}$ d per lb. higher than the previous prices; by private contract taken chiefly on speculation. 2400 Surat 7 1-8d to 7 5-8d for 600 very ord. to mid., the rest 8d a 8 $\frac{1}{2}$ d for fair to good; 550 Madras 7 3-8d a 8 1-8d mid. to good fair, export houses have taken the remainder. The prices and sales by private contract previously consisted of 310 Bengal, good 8 $\frac{1}{2}$; 1250 Surat ord. to good 7 $\frac{1}{2}$ d a 8 $\frac{1}{2}$ d; 25 Boweds fair 10 $\frac{1}{2}$ d.

London, 23d April.—By the Flemish and Dutch mails, the private advices from Antwerp and Rotterdam state that the markets for Colonial produce were very quiet, bordering on stagnation, owing to the holidays. Prices remain where they were, but have a tendency to decline rather than otherwise.

DOMESTIC SUMMARY.—Abner Lacoek, Esq. has been chosen President of the Mahoning Canal Company—this canal is a connecting link between the works of Pennsylvania and Ohio.

The receipts from tolls on the Pennsylvania internal improvements are rapidly increasing, as also those on the New York canals.

Mr. Van Renssalaer, of Albany, is erecting a dam on part of his estate in that city, which it is said will enhance its value half a million of dollars.

James W. McCulloch, Esq. has been appointed by the Governor and Council of Maryland, Director of the Revision of the laws of that State.

The steamboat *Majestic*, while stopping at Memphis, Tennessee, on her way from New Orleans to St. Louis, on the 13th ult., burst her boiler, by which disaster 40 persons were either killed or missing. Eight bodies had been found the ensuing day. The passengers were principally German Emigrants: there were 20 cabin passengers, in addition, from various parts of the Union.

The cholera, at last advices, was making great havoc at New Orleans, and in the boats on the river.

The 3 story brick building on the south side of Canal street, and between Camp and Magazine sts. New Orleans, occupied as the Planter's Hotel, fell to the earth on the night of the 14th May, burying in its ruins about 50 persons, more than forty of whom escaped with life. The dead bodies of three gentlemen had been dug out, and it is supposed that there are four or five still under the ruins. Of those who have escaped, some are wholly without hurt; some slightly wounded; but many shockingly mangled; all of whom, however, it is thought will survive. The cause of the

falling of this house is said to be the taking away too much of the support, the lower story being undergoing repairs.

Three years ago the town of Chicago, at the head of Lake Michigan, Illinois, contained 54 persons, now it has a population of 4000, including about 30 merchants—5 churches—a steamboat communication twice a week to Buffalo, besides transportation by sloops and schooners—and such is the rapid growing value of property, that water lots 40 by 200 feet have been sold at from 2 to 7000 dollars. This is a picture of what was once THE WEST.

MISCELLANEOUS.

THE VOICE OF MY COUNTRY.

BY MRS. SIGOURNEY.

I heard a bitter sigh
Break from another's breast,
And knew it was my country's voice,
That thus her sons address:—
"Ye are my crown of hope,—
Dim not its peerless ray;
Ye are sinews of my strength,—
Cast not that strength away.
"There is a fiery cup,
Whose ministry is woe,
Can melt the spirit's purest pearl,
And lay the mightiest low.
Turn from its treacherous tide,
Repel its syren claim,
Nor let me 'mid the nations blush,
And mourn my children's shame.
"And will ye, for the sake
Of one brief poison draught,
The record of my fame debase,
By blood and suffering bought?
And will ye cast that stain
Upon my banner's ray,
Which all the rivers of your realm
Can never wash away?"

The city of Mobile, as we learn from the Register of that place of the 17th ultimo, has increased within three years, in population, from 4,000 to 65,000, and its exports, from \$11,000,000 to upwards of \$14,000,000, with a correspondent increase of imports. Real estate within her corporate limits, has advanced in value from one to two and three hundred per cent, and as an evidence of the safe manner in which business is conducted, it is mentioned, that not one of the banks there has lost a dollar in seven years. This is a highly gratifying picture of one of the most thriving cities on our seaboard, and it will be hazardous nothing in predicting, that her march to greatness and wealth, will be marked by all the freshness and vigor of youth, and with a giant's stride, and that she bids fair, ere long, to assume a proud and enviable rank amongst her Atlantic sisters.

CONTENTS OF THIS NUMBER.

Renovation of asparagus beds—How to raise early vegetables—Notice of the geological survey of Virginia—The Baltimore market—Hint to agriculturists, relative to root crops—Wintering Sheep—New inventions—A cultivator, and a thrashing machine—Mr. Robinson's essay on potatoe culture—how to prepare greensward—Asparagus beds—how to dress and renovate them—The Portuguese mode of cultivating onions—Garden work for June—Steep for garden seeds—method of destroying insects—Report of Maryland Horticultural Society—Inquiry concerning sheep—Important facts to be observed in rearing stock—On sows destroying their young—On opening and distending the milk vessels of cows—Foreign abstract and markets—Domestic summary—Voice of my country—City of Mobile—Prices current—Bank note table, &c.—Advertisements.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM.	TO.
BEANS, white field,	bushel.	2 50	
CATTLE, on the hoof,	100lbs.	7 50	8 00
Slaughtered,	"		
CORN, yellow,	bushel.	83	85
White,	sales	85	
COTTON, Virginia,	pound.	17½	18
North Carolina,	"		
Upland,	"	18½	20
FEATHERS,	pound.	35	37
FLAXSEED,	bushel.	1 37½	1 50
FLOUR—Best white wheat family,	barrel.	7 25	7 75
Do. do. baker's,	"	6 75	7 25
Do. do. Superfine,	"	6 00	6 25
Super Howard street,	"	6 00	6 12
" wagon price,	"	5 75	6 00
City Mills, extra,	"		
Do.	"	6 00	6 12
Susquehannah,	"	6 00	
Rye,	"	4 62½	4 75
GRASS SEEDS, red Clover,	bushel.	5 00	5 25
Timothy (herds of the north)	"	2 50	3 00
Orchard,	"	none	
Tall meadow Oat,	"	2 00	2 50
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.	18 00	20 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
Hogs, on the hoof,	100lb.	6 00	6 75
Slaughtered,	"		
Hops—first sort,	pound.	12	20
second,	"	10	
refuse,	"	8	
LIME,	bushel.	33	35
MUSTARD SEED, Domestic,	"	5 00	6 00
OATS,	"	49	50
PEAS, red eye,	bushel.		
Black eye,	"		1 25
Lady,	"		
PLASTER PARIS, in the stone,	ton.		3 12½
Ground,	barrel.	1 37	
PALMA CHRISTA BEAN,	bushel.	2 00	
RAGS,	pound.	3	
RYE,	bushel.	92	95
Susquehannah,	"	95	96
TOBACCO, crop, common,	100 lbs	3 75	5 00
" brown and red,	"	5 00	7 00
" fine red,	"	7 00	9 00
" wrapper, suitable	"		
for segars,	"	6 00	12 00
" yellow and red,	"	8 00	12 00
" yellow,	"	9 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	4 00	5 00
" ground leaf,	"	5 00	9 00
Virginia,	"	5 00	10 00
Rappahannock,	"		
Kentucky,	"	6 00	9 00
WHEAT, white,	bushel.	1 32	1 38
Red,	"	1 20	1 28
WHISKEY, 1st pf. in bbls.	gallon.	37	38
" in hhd's,	"	37	dull
" wagon price,	"	33	
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 25	
To Wheeling,	"	1 50	
WOOL, Prime & Saxon Fleeces, ..	pound.	62 to 75	26 to 28
Full Merino,	"	52	62 24 26
Three fourths Merino,	"	45	52 23 24
One half do.	"	40	45 23 24
Common & one fourth Meri.	"	35	40 22 24
Pulled,	"	35	38 23 26

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.		
BACON, hams, new,	pound.	11½	
Shoulders,	"	9½	9½
Middlings,	"	9½	
BUTTER, printed, in lbs. & half lbs.	"	31	37½
Roll,	"	25	28
CIDER,	barrel.		
CALVES, three to six weeks old,	each.	3 00	6 00
Cows, new milch,	"	17 00	30 00
Dry,	"	8 00	12 00
CORN MEAL, for family use,	100lbs.	1 85	1 87
CHOP RYE,	"	1 87	1 94
EGGS,	dozen.		12
FISH, Shad, No. 1, t'd 7 50; untr'd	barrel.	7 25	
Herrings, salted, No. 1,	"	sales	4 50
Mackerel, No. 2&3, none; No. 1,	"	scarce	7 25
Cod, salted,	cwt.	2 25	2 75
LAMBS, alive,	each.		
Slaughtered,	quart'r		
LARD,	pound.	9	10
ONIONS,	bushel.		100
POULTRY, Fowls,	dozen.		
Ducks,	"		
POTATOES, Irish,	bushel.	62½	87½
Sweet,	"	1 25	1 50
TURNIPS,	"		
VEAL, fore quarters,	pound.		
Hind do.	"		

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par	
Branch at Baltimore,	do	
Other Branches,	do	
MARYLAND.		
Banks in Baltimore,	par	
Hagerstown,	¾a	
Frederick,	do	
Westminster,	do	
Farmers' Bank of Mary'd,	do	
Do. payable at Easton,	do	
Salisbury,	uncertain	
Cumberland,	¾a	
Millington,	do	
DISTRICT.		
Washington,	Banks, ¾	
Georgetown,	do	
Alexandria,	do	
PENNSYLVANIA.		
Philadelphia,	¾a	
Chambersburg,	¾a	
Gettysburg,	do	
Pittsburg,	1½a2	
York,	¾a	
Other Pennsylvania Bks.,	1½a2	
Delaware [under \$5],	¾a4	
Do. [over 5],	¾a1	
Michigan Banks,	¾a	
Canadian do.,	¾a	
VIRGINIA.		
Farmers Bank of Virginia,	¾a	
Bank of Virginia,	do	
Branch at Fredericksburg,	do	
Petersburg,	do	
Norfolk,	do	
Winchester,	do	
Lynchburg,	do	
Danville,	do	
Bank of the Valley,	do	
Branch at Romney,	do	
Do. Charlestown,	do	
Do. Leesburg,	do	
Wheeling Banks,	do	
Ohio Banks, generally,	¾a3½	
New Jersey Banks gen.,	1½a2	
New York City,	¾a3	
New York State,	2½a3	
Massachusetts,	2a2½	
Connecticut,	2a2½	
New Hampshire,	2a2½	
Maine,	2a2½	
Rhode Island,	2a2½	
North Carolina,	¾a4	
South Carolina,	¾a3	
Georgia,	4½a5	
New Orleans,	do	

ADVERTISEMENTS

A BAKEWELL BUCK.

WANTED for an extensive agriculturist in the north, a Buck of the Bakeswell breed of Sheep, to supply the place of one which has recently died. He must be a first rate animal, of the purest blood, and of fine points. For such an one, a liberal price will be paid. Application to be made to the editor of this paper. je 2j

RICE MEAL.

FOR sale a few kegs (containing 40lbs) of nicely manufactured rice meal, a delicious and wholesome article. Apply to
SINCLAIR & MOORE,
May 19 Light street.

FOR SALE,

A BROOD MARE about 15 hands high, color black, fine form and action. Apply at this office.
May 5th.

FOR SALE,

A DURHAM BULL—Apply at this office.
June 2

LUCERNE SEED.

FOR SALE ON PLEASING TERMS,

500 LBS. fine quality LUCERNE or FRENCH CLOVER SEED. This is one of the most valuable grasses which has as yet been introduced into cultivation in our country, and can be recommended as being particularly adapted to the purposes of soiling, as it is fit for the scythe fully two weeks before the common Red Clover, and can be advantageously cut several times in the course of a season. Persons sowing this species of Clover, should also sow with it half a bushel of Rye, or some other grain to the acre, so as to protect it from weeds the first year, or until it attains its wonted strength and becomes sufficiently mattered to smother the weeds. The quantity of seed sown to the acre is 18lbs.

ALSO, SCARLET CLOVER, or Trifolium Incarnatum, a very early sort, possessing many advantages.

St. FOIN, and BURNET GRASS seed, both highly spoken of for culture in high, dry soils, as improvers of land—which, together with

RUTA BAGA TURNIP, WHITE FLAT, YELLOW BULLOCK, EARLY DUTCH, and many other sorts, all of the best varieties of Turnip Seeds, for field and garden culture, are confidently recommended as of the very first quality, being selected with great care, and due regard paid to their freshness.

R. SINCLAIR, Jr.

At Seed Store connected with this Office.

June 2.

TRIFOLIUM INCARNATUM,
OR SCARLET CLOVER.

Just received a few casks of this valuable grass seed, lately introduced into this country from Germany, where it produces two good crops in one year. From its early growth in Spring, when other articles for feeding stock are so difficult to be procured, it is likely to become a valuable acquisition to American Husbandry. It blooms and is fit to cut in 50 days after sowing, and is not so coarse as the common Red clover, better furnished with leaves, and not liable to lodge or loose its leaves in drying. From its rapid growth it is of great value for an early crop, for soiling in summer, or for supplying food when other grasses are winter killed.

Also in store, St. Foin or Espersett, well suited for high dry soils, improving poor land, &c.

Burnet Grass, similar in character to the St. Foin, being well adapted to high, poor, dry soils.

Spring and Winter Vetches or Tares, Lucerne, Ray Grass, Feather grass, and many other rare, and common Field Seeds.

Twin Corn, producing from 4 to 8 ears on each stock. Garden Seeds, a general assortment.

ROBT. SINCLAIR, Jr.

April 14. at Sinclair & Moore's Md. Ag. Rep.

TERMS OF THIS PAPER.

1. Price five dollars per annum, payable in advance. When this is done, 50 cents worth of any kind of seeds on hand will be delivered or sent to the order of the subscriber with his receipt.

2. The manner of payment which is preferable to any other for distant subscribers, is by check or draft on some responsible party here, or else by remittance of a current bank note; and to obviate all objection to mail transmission, the conductors assume the risk.

3. Subscriptions are always charged BY THE YEAR, and never for a shorter term. When once sent to a subscriber the paper will not be discontinued (except at the discretion of the publishers) without a special order, on receipt of which, a discontinuance will be entered, to take effect AT THE END of the current year of subscription.

4. Subscribers may receive the work by mail either in weekly numbers, or in monthly or quarterly portions; or else in a volume (ending in May annually), handsomely pressed, half bound and lettered (to match with the American Farmer) by such conveyance as they may direct: but the \$5 must in all these cases be paid in advance.

ADVERTISEMENTS relating to any of the subjects of this paper will be inserted once at one dollar per square, or at that rate for more than a square, and at half that rate for each repetition.

THE Subscriber has just received by the ship Canada a splendid assortment of English and Dutch Garden and Field Seeds. The respectability of the gentleman by whom these seeds were raised warrants me in recommending them with perfect confidence. But to be certain of the quality and to prevent disappointment to purchasers, proof samples of each sort are taken and will be fully tested in hotbeds prepared for the purpose.

ROBERT SINCLAIR, Jr.

At Sinclair & Moore's Maryland Agricultural Repository, Light near Pratt street.
March 3.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 6.

BALTIMORE, MD. JUNE 9, 1835.

Vol. II

THIS publication is the *successor* of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, JUNE 9, 1835.

CLOVER WITH OATS—Many farmers are getting into the habit of sowing clover with their oats, under the belief that it takes better than with wheat or rye. The ordinary rotation in most parts of the union is corn, oats, rye or wheat with clover. In order to secure the enriching properties of clover, even in this rotation, it is said to be profitable to sow the clover with a view of turning it under for rye, or wheat, in the fall. The expense of seed is but trifling when compared with the benefits resulting from the pasture thus afforded from the time the oats are cut to that of ploughing for winter grain—this alone is worth more than all the expense of seed, independently of the enriching qualities of the clover ploughed in.

We insert to-day a most valuable communication from an intelligent correspondent, on the subject of "MIXED CROPS." His manner and matter will both commend him to the reader. To an ardent and enthusiastic devotion to the pursuits of husbandry, the accomplished author adds great experience as a practical and scientific planter. Few men in any country, whether by precept or example, have done more for the cause of agriculture than he has: nor has his labors in its behalf been alone confined to the cultivation of fields, or the improvement of former systems of culture; for in the legislative halls of his state, he has gallantly stood up and pleaded for the advancement of its interests with power and effect. To such men, our countrymen, if required to exhibit their jewels, might proudly point, as indeed, they are more precious than much fine gold, and deserve the richest meed which a grateful people can bestow. If there be one situation more enviable than another, it is that of a virtuous, intelligent, and patriotic agriculturist, laboring with ardor, not only to promote his own pecuniary interests, but those of the community in which he lives—striving with energy and usefulness, to add to the comforts and happiness of man,

by increasing the means of his support. Such a man is our highly esteemed correspondent. How praiseworthy is the example which he sets to his agricultural brethren—and still more, how laudable would it be, were they to emulate his example. He is not content to enjoy light himself—he hides it not under a bushel—but arrays it on the house-tops, that others may participate in the benefits resulting from his skill, experience, and enterprise. We need not say, that we shall be at all times happy to receive communications from the same patriotic and enlightened pen.

GREAT YIELD OF CORN.

We have ever considered the proper husbanding and application of manure to be the true basis of good husbandry; and if the proposition was not a self-evident one, the following article would be conclusive upon the subject. Here we find *three acres* of strong alluvial soil, producing $81\frac{1}{2}$ barrels of corn, being equal to 27 1-6 barrels to the acre; and this large amount, as will be seen, was produced too, without any extraordinary pains as to cultivation. The congeniality of location, doubtless, exercised a favorable influence on its growth; but we apprehend the great mystery in the productiveness of the crop, is to be referred to the strength of the soil, together with the peculiar adaptation of those alluvial depositions and vegetable accumulations, which, for ages had been forming a natural and mellow compost, most happily fitted for the culture of corn. What nature did, however, for this fertile spot, may be effected to a very great extent, for less favored ones, by artificial means, judiciously used; and therefore, every enlightened agriculturist should set about in earnest, with fixed and determined resolution, *not* to have the *largest* corn field in his respective neighborhood; but to make the *fewest number of acres produce the greatest number of barrels* of corn, without destroying the vitality of the soil. These are considerations which should never be lost sight of by the husbandman, as the maintenance of his ground in good condition should be just as much an object of importance with him as lucrative production. By putting *twenty acres* in a state to yield as much as is ordinarily produced on *fifty acres*, the cost of the labor on the extra thirty acres is *saved*, which is a gain on the labor alone of three-fifths,

or 60 per centum—a most splendid profit of itself. Would it not then, be better, infinitely better, to direct attention to the *concentration*, rather than the *expansion* of the quantity of land tilled, and thereby economise means? Having respectfully submitted the question, we shall give the article which has elicited these remarks, and ask for it an attentive reading:

To the Editor of the Farmers' Register.

Nelson County, Feb. 17, 1835.

A small piece of land in this vicinity was made to produce the last year a crop of corn so unusual in the amount per acre, as to attract much notice in this region, and perhaps to merit being recorded for more public attention. It was grown on an island in James River, about two miles from the mouth of Rockfish. The whole island, it is supposed, may contain $3\frac{1}{2}$ acres. But the portion cultivated was estimated not to exceed three—a part of the upper end having been left in trees and shrubbery, to arrest logs and other trash brought down by freshets, which might otherwise injure the crop, and a part left untilled near the water's edge all round. I rode with the manager over the ground and concurred in the opinion expressed by more competent judges who had previously visited it, that the above estimate was not extravagant. The product we are assured was eighty one and a half barrels, or over twenty-seven barrels to the acre.

The mode of cultivation as reported by the overseer, was as follows. The ground after being cleared up was laid off in drills four feet apart. A coulter was then drawn to its full depth, backwards and forwards, along the directions of these drills, and a single furrow with a two-horse plough was thrown to them on each side. The top of the bed thus formed, was again opened by a coulter, and the corn sowed in March, as thickly as cotton seed usually are. It was twice cut down by frost, and many of the plants pulled up by birds. When thinned near the parts thus depredated, three and four stalks were left standing together, and the rest left at intervals of four to six inches. As usual here, the coulter was run next the corn after coming up. The balks were broken up with a one-horse plough. It received no cultivation after harvest, and the result was as mentioned. The overseer thinks that much was pillaged by boatmen, and a considerable quantity lost by the weeds, which in many places were as high as the corn—and is confident that with increased care a larger crop may be made from the same land another year.

It is the purpose of the proprietor, Mr. Samuel Jones, of Buckingham, to have an accurate survey of the island, so that we may see the exact result. The land is not apparently richer than much in the same neighborhood, and along the river—so that we may legitimately infer that there are many farmers unaware of the capability of their soil.

N. F. CABELL.

THE FARMER.

INCREASE OF MANURE.

Sir Humphrey Davy, in speaking of manures, remarks, that during the violent fermentation which is necessary for reducing farm yard manure to the state in which it is called *short muck*, not only a large quantity of *fluid*, but of *gaseous matter*, is lost; so much so that the dung is reduced one-half, or two-thirds in weight, and the principal elastic matter disengaged is carbonic acid, with some ammonia; and both these, if retained by the moisture in the soil, are capable of becoming a useful nourishment for plants.

As soon as dung begins to decompose or rot, it throws off its volatile parts, which are the most valuable and efficient. Dung which has fermented so as to become a mere soft cohesive mass, has generally lost from one-third to one-half of its most useful constituent elements. It evidently should be applied as soon as fermentation begins, that it may exert its full action upon the plant, and lose none of its nutritive powers.

If these opinions be well grounded, and from the high source whence they emanate, as well as from their reasonableness, there can be no doubt but that they are, it then follows, that common sense would teach agriculturists, that all long manure as it may be freshly taken from the stable and placed on the dung heap, should be covered with earth: and it as naturally follows, that the gases which are thrown off from the decomposing manure, and which forms the nutriment on which plants feed, would be thus diffused through the body of the superincumbent earth and become incorporated therewith. By this means and by observing a just economy in his dung-stead, every farmer and planter might multiply his manure to almost any practical amount. The expense of hauling into the barn yard a few loads of earth, which might be taken from any convenient field or part of the plantation, would hardly be worthy of serious consideration. They could be hauled at periods when the time of hands, horses, and wagon, could be best spared, and placed in situations about the yard where they would be available when required. By this process, a most valuable body of manure, which otherwise would be lost, would be annually made, to the great benefit of master and of beast, the melioration of the soil, and consequently, of the improvement in the quality and quantity, of crops of every kind. And the volume of this manure could be greatly increased, if all offal vegetables, pea-vines, potato-vines, bean-vines, corn-stalks, chips, scrapings of cellars, and all other refuse substances, as they might ac-

cumulate, were taken and carefully placed upon the dung heap and covered with a layer of three or four inches of earth—and to these there should be added, during the season of their growing, the weeds which incumber the fence corners, garden, lanes, and other places, which are so unsightly, and present such striking evidences of slovenly farming on many estates. If these were daily gathered and placed on the common pile, and treated as before recommended, many hundred loads of most valuable manure might, at a trifling expense, be yearly made, and farms, which now are what are termed, worn-out lands, be soon restored to a state of healthful fertility; the complaint, so generally and so justly preferred, of a scarcity of manure, be banished from our land, and we should be again cheered with those sights, at once so animating and profitable to agriculturists,—fruitful fields, and well filled barns and granaries.

To bring about these desirable results, nothing is wanting but *the determination to accomplish them*. When that shall once have been taken, with the inflexible purpose of carrying it into effect, the greatest obstacle will have been removed. No one can tell the amount of difficulties which it is within his power to overcome, until he manfully makes the trial. Perseverance we are taught, will alone effect wonders, and there can be no question of the truth of the adage. Had those of the present century been content to plod on in the old beaten track of their ancestors, space would not have been subdued by the matchless invention of steam—rail roads, and canals, and steam boats, and their countless concomitant blessings, conveniences, and comforts, would have been unknown in our country. These are trophies in the arts and sciences, which are distinguishing the present above any other age for discoveries of a useful tendency; and should not their brilliancy and rich pecuniary rewards, urge the agriculturist forward to avail himself, too, of the many lights which science has already shed, is now shedding, and will continue to shed, upon the pathway of the husbandman? Why should not he too, forsake those impoverishing rules of his ancestors, which have brought decay upon many a splendid patrimonial homestead, and rendered fields once productive and generous, as sterile and arid as the deserts of Arabia?

There is no good reason why he should not shake off the old and palsyng ways of those who have brought poverty and wretchedness to doors where wealth and contentment were wont to dwell. Let the observing agriculturist look around among his neighbors, and see which of them

within the last twenty years have *improved* the condition of his land, and, our life upon it, he will find, that the melioration has been produced by adopting the new plans which have been developed by men, who, in their experiments, have been wise enough not to reject the results of chemists in their application of science to the practical uses of agriculture. Such being the case, all we ask is, that no man having an estate which has been rendered unproductive by bad or injudicious tillage, will longer doubt in his ability and means to bring it again into good tilth; for to doubt, in such circumstances, is to become the victim of a system which must, and will entail misery upon himself and his offspring. Had Bonaparte taken counsel from the croakers around him—had he trodden in the war-path of his predecessors, he never would have passed his army over the Alps, and the glory of the deed would have been lost to his fame—so also will it be with the agriculturist whose enterprise and genius shall combine, to enable him to triumph over his impoverished estates—whose energy and skill, prudence and foresight, shall induce him to husband his manure—whose judgment shall direct him to convert every thing susceptible of it into food for the plants of his fields. We say, the achievements of a such a man, though it be in the peaceful sphere of an agriculturist, will do more for the true glory of his country—for the good of his kind, than would a thousand well-fought and successful battles. Military renown has its attractions, and its possessors are doubtless entitled to the enduring gratitude of their countrymen: but the man, who teaches his fellow how to multiply the comforts and necessities of life—who increases the fruitfulness of the earth—though he moves on in the even tenor of his way, unaccompanied by a splendid retinue, unsurrounded by admiring satellites—is doubly entitled to the thanks of grateful hearts—for his victories are unstained by human blood—his trophies are the trophies of peace, and all their tendencies calculated to increase the sum of human happiness.

MIXED CROPS.

To the editor of the Farmer & Gardener.

SIR—My last paper gave the detail of a crop of corn, made by me, and raised in a way, that I have for some time practised with much success, and for which success, I was induced to endeavor more ardently than I should perhaps otherwise have done, in consequence of a communication, which appeared in your valuable "Farmer," from that distinguished, enlightened, and patriotic cultivator, Judge Buel. The balance of my mode of making this crop, originated as before mentioned, and in farther explanation of that part, I will add a few remarks.

In the formation of *mixed crops*, I endeavor to

find out those plants, that can live, and grow, in the vicinity of each other, without affecting the growth, or production, of their neighbours.

That there are such plants, a little planting knowledge must have satisfied any cultivator of the earth. That *PEAS* may be put in the *hill* with corn, without affecting its growth or production, is within the knowledge of all corn makers, especially in the south, and the same is known to many, of the sweet potato. Indeed, this fact appears conclusively to settle the theory often avowed by agricultural writers, that some plants were intended by their very construction, to obtain their principal nutriment from the atmosphere, and which we know is charged with the pabulum, or food for plants—and that those professing so much luxuriance of *leaf* and *vine*, are of this class. Another theory seems to be no less confirmed, by the foregoing fact, viz: that different plants require and find, or feed, on different nutriment. The luxuriance with which a bunch of *rice* will grow, if permitted, on a hill of corn, I have, with others in this section of the country, often noticed; and, indeed, if I were to raise a crop of *rice*, for *quality*, I should, being guided by the result of frequent trials, prefer planting with corn, in alternate rows. The partial shading which the *rice* receives, in its first stage, by the moisture (a thing so essential to *rice*) being retained in the earth, longer, by the leaves of the corn, I am satisfied is an advantage to the *rice*—and the corn can be removed in time for it to fully mature. On this theory, then, I made the selection of plants, cultivated in the crop before described—and the season favored my attempt. It was a *good one*, and the *manuring* I gave, was a *good one* also. In the transaction, there were *two good points*.

That relentless driver, a good, full, cotton crop, selling at seventeen cents per pound, and the pods falling out for want of picking, prevented me, from attending to the admeasurement of the different products; but I am assured, I speak safely when I say, that the corn was as good as could be made at *five feet by three*, and *two stalks* in the hill.

The potato, the *bunch* species, is peculiarly fitted for this mode of cultivation, having almost no *vine*, although the red answers well. The different ploughings given to the corn are found extremely favorable to the expansion of the root, and formation of the potato crop, and by the end of the season they will be found, especially of the kind first mentioned, *filling* the ground. For a *Hog range*, nothing can exceed this mode of raising that highly valuable root. I am satisfied that from a row which I gathered, that the acre would have given one hundred and fifty bushels. The *rice*, the large white, gave about forty bushels of *shelled rice* to the acre, and the *peas* would here yield twenty; the *pindars*, [ground-nuts] generally, a pint to the hill. The *rice* was cut, and *carried* off just as the *potato* crop was entering that stage, when they advance, in good seasons, so rapidly to full maturity. They had, therefore, full play. The *pea* crop, it will not be forgotten, from the time the corn was *removed*, which was almost as soon as *peas* are generally sown, or planted, had nothing to impede their progress to maturity; but on the contrary, a very *superior* opportunity, to *peas* generally planted among corn. They had fine

distance, and *air*, and *light*. The *pea* and *vines*, and the *potato vines*, were saved by me by a process perhaps new to your readers; but the valuable result of which I can assure them, will, on trial, amply repay for the labor bestowed. Just as the *peas*, the black, and red tory, reach maturity, I walk along the rows, and pull up the *vines* gently, piling them up so as to admit the air the most freely to pass through. This is done while there appears some security for a few days of fair weather. The third day, (in the mean time paying a little attention to them daily) they are taken up carefully, and laid in a light waggon bed, on four low wheels, and hauled home, and placed in the *barrack*, or what does admirably, in well built rail pens, well covered; in either case a *good floor*—as follows:

The floor is first *sprinkled* with dry, well cured straw, rye, wheat, or rice,—then a layer of *pea vines*, say when gently trod down by children, about twelve inches thick, on which a *liberal* sprinkling of fine *salt* follows—a little *straw*—*pea vine* and *salt*, until the pen or barrack is filled. For my sheep, steers, cows and calves, this *refuse* is found number one, and when it can be cut, and steamed, surpasses number one.

My *potato vines* just before digging, are cut, by running along the ground with a short briar scythe; the gatherers having a hawk bill knife, hanging to their waist to loosen any not detached by the scythe. Those are managed precisely as the *pea vines*, only the *layers* of vines are made thinner, when stacking in the pen or barrack. The *pindar-vines*, follow the same routine. In all this process, I never get in the least haunted with the fear of *loosing salt*. My cattle get it, *when*, and *where* and *how*, I want them to get it, viz. *with their food*, and *when eating*. This part of my theory, *stock managers* will understand—and equally, why I add, while stacking a little *saltpeetre*, and *copperas*—both calculated to save the refuse and benefit the stock.

After this detail, I need hardly add, that my *milk cows*, or my faithful oxen, are never found, “shivering it out,” in the bleak, piercing, cold rains of a December night, or perishing in a bog, stretching after a mouthful of green food, in March. Nor need I say, that I have no manure to haul out, in the spring. In fact, sir, I am not solicitous about the furnishing of my *table*, as I am the furnishing of my *dung-stead*, for like the honest Hibernian, with his horse and spur, I feel assured, that if “I keep up the one side, I know my honey, that the other will follow.”

An additional advantage of the foregoing mode of cultivation, is, that I am fully justified by the crop, in all the labor I bestow, in a nice, and *clean* cultivation, with the hoe, although at last, it is little more than the “good old way.”

I am relieved from the necessity of additional *fields*, and *preparation*, for *two* of the most important crops, for the comfort of a family, as well as for animals—the *sweet potato* and the *turnip*—the first I have detailed, how they are made,—the last, I simply sow over the field, that is well manured, about the last dressing of the crop, viz: the seed of the *Turnip*, *Radish*, and *Cabbage*,—and I have a profusion of each. If I want later turnips, I keep a part of the field unsowed, until the full moon in September. It will be seen that my

mode of cultivation and manuring, is peculiarly calculated to keep the ground loose, and prepared for the *turnip* production, especially the *Ruta Baga*—and which I raise in this way in great perfection.

AGRICOLA.

GRASSES.

We commence to day the publication of the first number of a series of Essays on the interesting subject of grasses, from the pen of *Abednego Robinson*, Esq. of Portsmouth New Hampshire, a wealthy, intelligent and practical farmer. Than the culture of grasses, nothing is, perhaps, of deeper interest to the agricultural community, and hence every light which can be thrown upon it is of profound concern. We invite attention to *this*, and the numbers which may follow:

From the Portsmouth Journal.

Permit me gratefully to acknowledge through your paper, the receipt of a small package of the seed of the Gama Grass, with a letter, from William Starr, Esq. of Savannah, Geo.—and to add some remarks on the culture of Grasses generally, at the North and at the South.

Mr. Starr informs me, that he was induced to send the seeds, by seeing in the Northern Farmer, an acknowledgment of mine for four seeds of the Gama Grass from the editor of the paper,—as well as by his own apprehension that the seed, being slow in vegetation, might not come up, and so disappoint my hopes. He gives, from the American Farmer and Gardener, the following directions for sprouting it in three days: viz. “take of proof spirits and plaster of paris, a sufficiency to make it of the consistency of thin whitewash, set it by the fire and keep it milk warm for twenty-four hours, (the seed in it,) sow or plant them in good ground well prepared, and it may be necessary to protect them from the sun in a hot day.”

If these means prove effectual in sprouting the seed, it can truly be said that the discovery is valuable, and that one very discouraging obstacle in the culture of this Grass is surmounted. Mr. Starr thinks “it may be well to cover the young plants in our climate with straw in winter.” This inference seems to raise a doubt, or a question, whether we shall succeed in its culture here. His conjecture respecting my disappointment from my four seeds not vegetating proves correct. I had no advice for the management of them, therefore, my judgment led me from the nature of the seeds, being coated with a very thick hard shell, to pursue the following mode:—I put two of them into water, endeavoring to keep them milk warm for about ten days; perceiving that this operation had no effect, I determined to know what they were, for I never had seen any before; and they are strange looking things to those that are not acquainted with them. I took a sharp knife and it was with difficulty that I could penetrate them; I found one shrunk and imperfect, the other perfect and full, both perfectly dry, and no appearance of vegetation. I then planted them all separately with the greatest care, and have frequently and carefully examined them, and found them remaining entirely dormant, and if it was not that I have been informed by the editors of

he Northern Farmer, that they were slow to vegetate, sometimes fourteen months, I should have despaired of their ever vegetating. I do not, however, think it probable that they ever will.

The remaining remarks, I shall submit in the form of a letter to Mr. Starr.

For these favours, Sir, please accept my sincere and unfeigned thanks. I should have been very grateful for some particulars respecting the present state of the culture of this grass with you; it would have amounted to a certainty to me. The accounts I have had, have been very variable; the statements are from 150 to 30 tons per acre.—New things are apt to be overrated, and I do not know what allowance to make in this case. The different modes of culture on many vegetables has a very different effect; for instance, Indian Corn, if planted on the best of soil, and in the right season, if not hoed produces nothing, but with the right culture it grows very luxuriantly, and is very productive: and so it is with the Tobacco plant, the Cabbage, &c. These are not perennial, but it has a similar effect with many of the perennial tribe;—the dandelion will produce an hundred fold at least by hoe culture; Lucerne will not do any thing here without special care,—I have heard of 30 tons taken from an acre in one season in France from hoe culture. Many of our common Grasses if planted in good ground and hoed well, would have a much greater increase. I do not mean to recommend the thing, I only mean to show wherein we are liable to be deceived in a new thing. I should like to be informed what crop of Gama hay may fairly be expected from such light soil as it is said is congenial to the growth of it, the ground having been sown for several years, without any other culture than securing the fodder. I should also be pleased to know for a fact what has recently been obtained from an acre, and from what mode of culture. Some of these questions, or similar ones, if answered, would be very satisfactory to me, and no doubt to many. * I should be happy to be informed, that I might safely calculate on growing, on our light soils from two to four tons to the acre.

Suffer me, sir, to retain your attention a few moments while I make some general remarks on our different locations, habits and interests. I have reason to suppose you are an agriculturist, or at least much interested in its prosperity. Much of the products of our respective sections are very different, and many of our habits are consequently different, but this does not argue that we have no interest in each other's welfare and acquaintance, but the contrary; we are the more dependent for the exchange of our several products, for the interest, comfort, and happiness of each other. You have Cotton, Rice, Sugar, Molasses, Sweet Potatoes, Indigo, &c.—we need them. We have Hay, Beef, Fish, Irish potatoes, Butter and Cheese, Fruit, Wool, &c.—and you need them. Now, Sir, is it not obvious that we are interested in each other's friendship and prosperity;—the truth of this cannot be denied, and from your generous and unsolicited act, it is evident, you have a full sense of the fact. But, Sir, notwithstanding this great difference in our products and habits, occasioned doubtless by the difference in the climates of our respective sections of country, and that the products of each are, apparently, permanently settled,

there may still be great changes. Since my recollection there was no wheat grown in any of the Southern States. Virginia in particular, was deeply engaged in the culture of Tobacco, but from certain restrictions she lost her usual market, so much so that her sales would not in any case give her people a competency; from this circumstance they were driven to the alternative of some change of culture, or to let their lands lay idle and starve.—They accordingly tried the experiment to sow wheat; they found it to do well from that time to the present, and under the appearance of a seeming judgment, it was a blessing in disguise. They used to import all their Flour from New York, Pennsylvania, and Maryland, and now vast quantities of Flour are exported from that State, I presume more than from any other State in the Union. I name this circumstance before I dare to make the suggestion that it is possible, if not probable, that your State may equally change her habits.

ABEDNEGO ROBINSON.

ON THE POTATO—Mr. Hickey, of Sackville-street, has communicated to the Irish Farmer's Journal, a very singular and successful experiment, which has been tried upon the potato in the county of Dublin:

A gentleman who holds a farm of 150 acres planted in the usual manner 34 acres under potatoes, in the year 1832; the result was, a complete failure and a total loss of the crop. This induced him to try many experiments upon the root, all of which failed except the following, which exceeded his most sanguine expectations. He took six potatoes and divided them into twenty cuts—he then got a large basin of water, into which he put a cup full of salt and a piece of blue-stone about the size of a walnut. He put ten of the cuts into the basin, and let them remain there one entire night. On the following day he procured a very strong microscope, through which he examined the entire twenty cuts. On the ten cuts which were not immersed in the basin he distinctly perceived many small white particles, like eggs; and those cuts which were immersed presented no such appearance whatsoever. This discovery urged him to follow up the examination attentively, and every day for a short period he continued to watch the appearance of the aforesaid matter. The result was, that those white globular particles were animalculæ, for in a few days they became quite visible to the naked eye in the form of little worms or maggots. The cuts that had been steeped never showed the slightest appearance of any such thing, and they retained their solidity and firmness when the other ten cuts were completely decayed and rotted. Still unwilling to believe, without further proof, he tried the experiment five or six times, and planted them, distinctly marking a division between those cuts that were steeped and those that were not. The consequence was, the almost total failure of the one kind and the complete success of the other, placed the question beyond the possibility of a doubt. He considers that the air has a powerful effect upon the potato, and may sometimes impregnate it with this destructive matter. He is a gentleman of undoubted respectability and veracity, and will come forward, if required, to verify the truth of this statement.

SWEET POTATOES.

This excellent vegetable would be more extensively cultivated but for the great labor of planting and cultivating them in the usual mode, and for the difficulty of keeping them in the winter.

To obviate the first difficulty, I have, for about 20 years, ceased making hills altogether and planted in ridges. I break up the ground well, and if necessary, harrow it—then, with a bar-shear or cary plough, throw three furrows together. To complete the ridge, take a weeding hoe or fine rake and draw the dirt up first on one side and then on the other, to about the height potato hills are usually made. Open a trench on the top of the ridge and drop the slips five or six inches apart, cover with the hand about two inches deep.

This mode is attended with several advantages—requiring less ground, less labor in preparing the ground, less in cutting the seed roots, less in bending ridges than hills, and greatly less in digging. The last operation is done mostly with the plough. After clearing off the vines run a furrow along the ridge, taking down about two-fifths on one side, return and throw off as much on the other side, leaving about one-fifth in the middle, nearly full of potatoes, which can be easily torn to pieces with the hand. A hoe will be necessary to move the dirt thrown out by the plough, so as to facilitate the picking out the potatoes.

This mode of cultivating and taking up the crop, reduces the labor, in my estimation, nearly one half.

To obviate the difficulty as to keeping, I put my potatoes in a garner in the cellar, putting chaff or dry dirt around and on them—put them up the same day they are dug. When freezing weather comes on close the cellar windows. In this way I had sweet potatoes for the table throughout the last cold winter.

Plant about the first of April, and be sure to dig after the first frost hard enough to bite the leaves.—Ohio Farmer.

THE GARDENER.

Our markets are abundantly supplied with strawberries, peas, cherries, and every other delicacy of the season, at prices so low that the wonder is, how such luscious things can be raised for so small amounts of money.

A NEW HEDGE PLANT.

The Horticultural Society of the District of Columbia, assembled at the residence of Mr. Robert Barnard, situated on one of those commanding heights near Georgetown, on Saturday, the 30th ultimo, where they were hospitably received, and partook of a rich and abundant repast of strawberries and cream, pine apples, and other refreshments. Mr. Barnard's farm is represented as one of peculiar neatness. He has introduced much of the English system into his arrangements: his stables and cow houses are all paved with stone, and kept quite clean; his farming and

horticultural implements are carefully disposed of in their appropriate places, and his out houses, bee-hive, poultry yard, fences, &c. are all in excellent order. The writer of the communication in the *National Intelligencer*, whence we abstract this, thinks, that in relation to the latter, Mr. Barnard has made a useful discovery. He has found that the *crab-apple* forms the best live fence, or hedge, that he has yet tried. A line of this hedge, of considerable extent, was shown to the members of the society by Mr. B., which was so closely interlocked as to be entirely impervious. It has been planted but a few years, and grows rapidly, and is believed to be superior to that formed by either the English or American thorn, the English, or white thorn, not being suited to our own climate. The *Crataegus crus Galli*, or Cockspur, and the *C. populi folia*, or Washington thorn, are said to have been tried with great success, are found to grow very luxuriantly, and to adapt themselves to any soil. The *Crab-apple* hedge exhibited by Mr. B. is one not only of considerable beauty, from its foliage, flowers and fruit, but promises to answer admirably the purpose for which it has been employed.

CULTIVATION OF THE PEACH TREE.

The following method of cultivating Peach Trees, with a view to prevent their premature decay, was communicated, in a paper on the subject, to the *American Philosophical Society*, by THOMAS COULTER, Esq., of Bedford county, Pa. The propriety of the culture has been confirmed, the author says, by an experience of forty-five years in the state of Delaware and the western part of Pennsylvania:

"The death of young peach trees is principally owing to planting, transplanting and pruning of the *same stock*, which occasions it to be open and tender, with a rough bark; in consequence of which insects lodge and breed in it, and birds search after them, whereby wounds are made, the gum exudes, and in a few years the tree is useless. To prevent this, transplant your trees as young as possible, if in the kernel it will be best, as there will be no check of growth. Plant them sixteen feet apart. Plough and harrow them, but avoid tearing them up by the roots. In the month of March or April, in the third year of transplanting, cut them off by the ground, plough and harrow among them as before, but with great care, to avoid wounding or tearing them. Suffer all the sprouts or scions to grow, even if they should amount to half a dozen or more; they become bearing trees almost instantaneously, on account of the strength of the root. Allow no animals but hogs to enter your orchard, for fear of their wounding the shoots; as a substance drains away through the least wound, which is essential to the health of the tree and the good quality of the fruit.

If the old stock is cut away the third year after

transplanting, no more shoots will come to maturity than the old stump can support and nourish, the remainder will die before they produce fruit, and may be cut away. Take care and not wound any other stock; the sprouts when loaded with fruit, will bend and rest on the ground in every direction for many years; all of them being rooted as if they had been planted, their stocks remaining tough and their bark smooth, for twenty years and upwards. If any of the sprouts from the old stump should happen to split off and die, cut them away; they will be supplied from the ground by others, so that you may have trees from the stump for one hundred years as I believe. I have now, trees from one to thirty-six years old, all from the same stump.

Young trees, formed in this manner, will bear fruit the second year, but this fruit will not ripen so early as the fruit on the older trees from the same stump. Three years after the trees are cut off, the shoots will be sufficiently large and bushy to shade the ground so as to prevent the growth of grass that might injure the trees; therefore ploughing will be useless and may be injurious by wounding them.

It is also unnecessary to manure peach trees, as the fruit of manured trees is always smaller and inferior to that of trees that are not manured. By manuring you make the peach trees larger and apparently more flourishing, but their fruit will be of a bad kind, looking as green as the leaves, even when ripe, and later than that of the trees which have not been manured. Peach trees never require a rich soil; the poorer the soil the better the fruit; a middling soil produces the most bountiful crop. The highest ground is the best for peach trees, and the north side of hills is the most desirable, as it retards vegetation, and prevents the destructive effects of frosts which occur in the month of April, in Pennsylvania."

TOMATO.—The tomato is used in soups and sauces, to which it imparts an agreeable acid flavor; it is also stewed and dressed in various ways, and considered as a very wholesome vegetable.

It should be sown in a warm border in May, or in hot beds in March, and transplanted about the first of June. Tomatoes do best on poor soil, being there more fruitful than on rich soil, where they run to vine with less fruit. Dr. Kitchener gives the following directions for preparing it for the table; it is also used in soups, and as a pickle:—"Take them when ripe and red; cut them in half; squeeze them just enough to get all the water and seeds out; put them in a stew-pan with a capsicum, (pepper,) and two or three table spoonsful of beef gravy, or a little butter; set them on a slow fire for an hour, or till properly melted; then rub them through a tamis into a clean stew-pan, with a little white pepper and salt, and let them simmer together a few minutes."—*Parkhurst's Catalogue*.

CAULIFLOWER.—These should be sown late in August and September, for early ones next spring—in April and May for late—treated generally like cabbages—should be transplanted three feet apart, in a very rich and rather a moist loam; a rich soil is indispensable for their successful culture. In order to blanch them handsomely, the leaves must be closed together at top and tied

gently. This delicious vegetable, as well as the Broccoli, is deserving of more general cultivation. The heads or flowers of the plants, when boiled in a clean linen cloth, and served up with melted butter, form a most delicate vegetable dish. It is a great favorite in Europe. Dr. Johnson observed, "Of all the flowers of the garden, give me the Cauliflower."—*Parkhurst's Catalogue*.

THE BREEDER & MANAGER.

HORSES AND OXEN.—The relative value of these noble and useful animals are thus briefly summed up by the intelligent editor of the *Northampton (Massachusetts) Courier*:

"Horses are used almost uniformly here for purposes of husbandry and labor. In many other parts of the State, *oxen* are the animals usual in requisition for agricultural purposes. *Oxen* are more suited to the plough than horses. They labor with more steadiness and ease, and are not subject to the sudden starts or the vexation occasioned by any detention in the plough. They are not easily fretted, and pursue the "even tenor of their way" with unwearied docility and perseverance. They are patient animals, and bear the goad and whip as Job did his "curses." *Horses* are more active on the highways, and are better adapted for draught than *oxen*. They move with more rapidity and accomplish much more labor in travelling than the *ox* can. They are used exclusively here for teaming, whereas, in other portions of the State, *oxen* are mostly substituted for horses.

COLTS, CATTLE, SHEEP, AND HOGS, RUNNING AT LARGE.

When much of this country was unenclosed, and the farmers had but little land cleared, it was allowed to permit creatures to run at large, but this is no longer the case. Humanity to animals requires that we should keep no more than our farms will support, and I think that interest requires it also. Justice certainly demands it.

Many farmers are in the practice of turning a drove of young cattle into the road early in spring. The scanty picking does not satisfy them, and hunger, if it will not break through stone walls, will often induce the poor, half starved animals to break through a rail fence, into a field of luxuriant wheat or grass. Is this justice? or is it calculated to promote harmony in neighborhoods? When a gate or bars communicating with the road is left open for a few minutes, these poor creatures or a drove of hogs are sure to enter.—But, besides this annoyance, our road-sides are much defaced by the rooting of hogs. I consider it the duty of every farmer to keep no more stock than can be subsisted on his farm, and there to confine them. Those who are unwilling to do this, should remove to the borders of one of the western prairies.—*Genesee Farmer*.

PRODUCTIVE COW.

The following statement of the cost, expense, and the avails of a cow, for 14 months, made by

a gentleman of this city, who has been a practical farmer, and who is no bad *calculator*, shows how profitable cows may be with proper management. A farm of 100 acres, by such calculation and management as stated below, supposing it kept only twelve cows, would afford an annual income of \$1600.

Dr. —Cost of Cow and Calf,	\$20	
Paid for Pasturage,	15	
1½ tons Hay, at \$15,	22 50	
One ton Corn-stalks,	6	
20 bushels Bran, at 20 c.	4	
226 lbs. Oil Cake, at 1 c.	2 66	
40 bush. Potatoes and Turnips, at 20 c.	8	
8 bush. Potatoes, at 42 c.	3 36	\$81 52
Cr. —By Calf sold,	\$5 44	
10 quarts Milk per day, for 14 months, at 5 cents per quart,	210	
Cow sold for Beef,	45 84	\$261 28
Nett profit,		\$179 76

New London Gazette.

BARN YARD HOG PEN.

Sir:—My father, whose farm I inherited and took possession of two years ago, had his hog-stye detached from his barn yard. Immediately on entering upon the farm, I removed my pen by enclosing a portion of the barn yard. I keep my stye well littered with straw, leaves, weeds, soil from the woods, and meadow earth obtained from ditching, by carting, together with that put into the yard, from two to ten loads per week. I sometimes put a few handfuls of rye in different places in the yard and let in hogs. Feeding them thus for a few days, they completely stir up and commute the contents of the yard. I am confident that I make four times the quantity of manure that my father did, and with no increase in number of stock—and of a better quality too, comparatively none of its strength being washed away by the rains, and evaporated by the sun. My farm consists of nearly 70 acres, principally in tillage. I am confident that I shall, in the course of a short time, get it all in a state of high cultivation, without laying out any money in the purchase of manure.—*Yankee Farmer.*

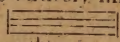
HEMP.

The following paper on the culture and mode of preparing the hemp in Russia, was transmitted by the Hon. John Quincy Adams to the State Department, while he was Minister at St. Petersburg, in March, 1810.

"In Russia, when the season is mild, the hemp seed is sown about the 1st June, old style. The richer the soil of the land employed for it, the better. A chetwirt of seed, (100 chetwirts are equal to 73 quarters, Winchester measure), is sown on a piece of land of 80 fathoms (English feet) long, and 60 fathoms broad.

The land is first ploughed and harrowed, and about 200 single horse loads of dung being spread upon it, it is left for six days, when it is again ploughed, and the seed sown and harrowed the same day. In about four months the seed becomes ripe, and the hemp is then pulled up with

the roots; if it be allowed to remain too long in the ground, it is apt to become harsh. It is bound into heads or bunches of four handfuls each; these are hung upon sticks placed horizontally, thus, X—0—0—0—0—0—X and allowed to remain so for two days. It is then made into cut or thrashed hemp, as may be agreeable. The cut hemp is made by chopping off the heads containing the seed. These are put into the kiln, and after remaining there for eighteen hours, the seed is beaten out.

If thrashed hemp is to be made, the heads or tops must not be cut off, but the bunches of hemp placed entire in the kiln; and if the weather be warm, it will be sufficiently dry in three days, when the seed must be thrashed out of the heads. In either case, three days after the seed is separated from it, the hemp must be put to steep or rot, either in a stream or a pond, and that the hemp may be entirely immersed, it is put under wooden frames  upon which stones are placed, or where they are not to be had, earth is substituted, after the frames are covered with planks.

The clearer and purer the water, the better will be the color of the hemp. Where the water is warm, three weeks steeping will be sufficient, but if cold, as in rivers, springs, &c. five weeks or longer may be necessary. At the expiration of this period, a head of the hemp is taken out and dried; if, on beating and cleaning it, the husk comes off, the hemp may then be taken out of the water, but if the husk still adheres to it, it must be allowed to remain some time longer. This trial must be repeated from time to time, till the husk separates, when the hemp must be taken out of the water, and suspended to dry, as directed before, on its being taken off the ground.

The hemp is now made into the two sorts, distinguished by the names of *Spring* and *Winter* hemp; the former being dry and rather of a withered appearance, the latter more moist, and of a fine brownish green color, containing more of the vegetable oil, and therefore the most apt to heat, though if not shipped at St. Petersburg or Riga, before September, there is not much risk of its heating any more on board the ships, especially on short voyages, as to England, and are the best fit for cables. If it be intended that the hemp should be early ready for the market, it is made into Winter hemp by the following process:—On being taken out of the water, it is left suspended in the open air for about a fortnight, when it is put into a kiln for twenty-four hours, after which it is broken by means of a hand-mill, and the husk is then beaten off by striking the heads obliquely with iron and wooden instruments, of the shape of a large two-edged knife; lastly, to unravel it, it is drawn through a wooden comb or card, with one row of wide wooden teeth, fixed perpendicularly.

The hemp is then laid up or suspended in sheds, and is fit to be sorted, bound into bundles, and loaded into the barks.

The hemp to be prepared as spring hemp, is allowed to remain suspended and exposed to the weather the whole winter, until it be dried by the sun in the spring, when it is broken and cleaned in the same manner as the winter hemp.

As the greatest part of the summer elapses before it can be made fit for the market, none of

this hemp reaches St. Petersburg until the following spring, that is, two years after it was sown.

The hemp is sown in the same manner as linseed, rye, or wheat; land of a sandy soil may also be employed for it, but it must be strongly manured, otherwise it will be too short, and a flat country should always be preferred.

One chetwirt of seed commonly yields 25 loads (upwards of 36 pounds English) of hemp, and twelve chetwirts of hemp seed.

VALUE OF HOPS IN THE DISEASES OF THE SKIN.—One of the best external applications for many eruptive diseases of the skin is a strong decoction of Hops, in which the limbs or other affected parts are to be bathed several times a day. The decoction should not be used until it has become perfectly cold. In bad ulcers of the leg the most satisfactory results have been repeatedly realized from this simple preparation.—*Med. Intel.*

Note by the Editor of the Farmer and Gardener.—We do not question the efficacy of Hops in cutaneous affections; but one of the best and surest remedies we have ever used, is a solution of chloride of lime and spirits—(we have generally used spirits of wine.) We have known tetters which had assumed a chronic form, to yield to the treatment after being bathed in the solution two or three weeks—in one case, the tetter had for 18 months resisted every other application, and during that period, the skin had been twice burnt off by corrosive sublimate, and was ultimately cured by being washed with the solution of chloride of lime and spirits. By the bye, this solution is one of the most efficacious gargles which can be used in cases of obstinate sore throat.

With respect to the treatment of bad ulcers of the leg, we would, in addition to the hop embrocation, powder the ulcerated part with charcoal finely pulverized, after each bathing.

DOMESTIC SUMMARY.

The Horticultural Society of Maryland held their annual exhibition on Wednesday, Thursday and Friday, of last week. The arrangements are represented as being tasteful and judicious, and the collections of flowers, fruits and vegetables unusually beautiful and attractive.

On Thursday evening, Francis H. Davidge, Esq. delivered an address, which is said to have been neat and appropriate, and to have repeatedly elicited strong marks of approbation from an audience equally distinguished for talent and beauty.

The seventh annual meeting of the stockholders of the Chesapeake and Ohio Canal company took place at Washington on the 1st inst. It appears by the report of the President and Directors that 110 miles of the canal is completed, and that the navigation is now open from Washington city to eight miles above Williamsport. Its cost thus far is \$4,200,590.

Capt. Shreve is successfully engaged in the removal of the raft of the Red River.

The city of Alexandria, D. C. has agreed to subscribe for 500 shares of stock in the canal, constructing between that city and the Chesapeake and Ohio Canal.

The State Bank of Illinois with a capital of a million and a half of dollars, is to go into operation about the middle of the present month.

Cases of Cholera have occurred at Nashville, Tennessee, but the alarm has subsided.

Sales of real estate to large amounts have within the last few weeks been made in Baltimore, which went off at very great advances upon former prices. A lot of 34 acres, a short time since, just within the western limits of the city, brought \$1600 an acre.

A man named Black who carried the mail between Lynchburg, Va. and Pittsylvania Court House, was convicted before the Fedal Court in Richmond, on the 25th ult. of robbing the mail, and sentenced to 10 years imprisonment.

The wheat crop on the eastern shore of Maryland is represented by the editor of the Whig to be more unpromising than ever before known.

We learn from the Commercial list, says the Philadelphia Gazette, that intelligence from Chester, Lancaster, Bucks, Berks, and Northampton counties in this State, from the upper part of New Jersey and from Delaware and the Eastern Shore of Maryland describes the grain crop as flourishing and likely to prove productive.

In such clashing of accounts, in the absence of positive proof, it is safest to hope for the best, although we are free to confess, our fears incline us to dread a very short crop.

Thomas F. Purcell, Esq. is about to make the examination and location of the route of the Chesapeake and Ohio canal from the south branch of the Potomac to Cumberland.

Efforts are being made in Virginia, to raise the sum of ten thousand dollars to be devoted to the establishment of a settlement in Africa, to be called New Virginia. It is to be founded under the auspices of the American Colonization Society.

FOREIGN ABSTRACT.

There have been two dreadful earthquakes in Chili. The first and most disastrous shock occurred on the 20th February. Of the large town of *Concepcion* not a building was left standing.—*Talcahuana* and five small villages in the harbor were destroyed. After the first shock the vessels in the bay were all left aground; but soon the sea rushed on in great rollers, and rising 25 or 30 feet, completely overflowed the land, sweeping away the ruins. On the 22d a large portion of the island of Caracana at the mouth of the bay was swallowed up. The shocks continued for several successive days. It was stated at the time of the departure of the ship *Coral*, by which arrival this news is brought, that from 25 to 30 towns, besides many small villages between *Concepcion* and the *Cordilleras* were scenes of complete ruin. From 4 to 500 persons are known to have lost their lives, and it is feared that it may amount to thrice that number. The sufferings of the survivors are immense.

At Jamaica a number of European emigrants had arrived to take the place of the coloured apprentices, as laborers on the plantations. The weather had been favorable for the crops.

The elegant Ship *Anne McKim*, arrived at this port, brings intelligence that the town situated on the island of Juan Fernandez was destroyed recently by an earthquake. The news was brought to Valparaiso a few days before she sailed thence.

MISCELLANEOUS

The following beautiful reply to the stanzas of Mr. Wilde, published in the first number of the *Messenger*, is attributed to Mrs. Buckler, the wife of a distinguished physician of Baltimore, a lady whose fine taste and poetic capacity are most happily displayed in these touching lines. The answer is a very perfect counterpart of Mr. Wilde's stanzas, and if we were called on to decide upon their relative merits, we do not know which of the two would most demand our admiration.—*Southern Lit. Mess.*

ANSWER

To "*My life is like the Summer Rose.*"

The dews of night may fall from Heaven,

Upon the wither'd rose's bed,

And tears of fond regret be given,

To mourn the virtues of the dead :

Yet morning's sun the dews will dry,

And tears will fade from sorrow's eye,

Affection's pangs be lull'd to sleep,

And even love forget to weep.

The tree may mourn its fallen leaf,

And autumn winds bewail its bloom,

And friends may heave the sigh of grief,

O'er those who sleep within the tomb :

Yet soon will spring renew the flowers,

And time will bring more smiling hours,

In friendship's heart all grief will die,

And even love forget to sigh.

The sea may on the desert shore

Lament each trace it bears away ;

The lonely heart its grief may pour

O'er cherished friendship's fast decay :

Yet when all trace is lost and gone,

The waves dance bright and gaily on ;

Thus soon affection's bonds are torn,

And even love forgets to mourn.

Woman.—Woman's feelings, sooner matured than man's, more early sink to decay. Ripened by habit and warmly sensitive by temperament, the age of twenty, when comes the first true budding of man's spirit, and the first free gush of his careless and generous heart, often witness the seared and blighted woman, with the cold and maddening memory of days gone by. The blight of our hope, the disappointment of one vision of happiness, throws a chill over her prophetic spirit, and wraps every dream in anticipated ruin ! Man is a different being, by his habits, his association; from disappointment he plunges into new pleasures, from one lost object he rushes on to new pursuits. It is a good characteristic of his nature, that he leaves the memory of sorrow for the hope of happiness. Well might it be for woman, if the indifference which she has sometimes reason to deprecate in him, were often to pour its Lethe wave upon her own bosom, which if it be called nature in its joy, yet clings with but too much constancy to its sorrow. Well might it be for woman, if the high laugh, and the careless, were not so frequently "roses o'er a sepulchre." Many a bright eye is dimmed, and many a fair brow clouded, while the more rugged spirit of man passes the fiery ordeal of suffering, with equal relish for a second pursuit, and equal strength for a second disappointment. Many a gay heart is broken, and the young bosom rests in its sepulchre, or seems in almost as lonely retirement, the oblivion or food of sorrow, while the buoyant spirit of youth, and the iron spirit of manhood, crush the thorns that would pierce them ; and the careless and the happy give one gaze to the passing

form, and one sigh to the early fate of woman, without a question or a thought, "why can such things be."

Beautiful Extract.—It cannot be that this earth is man's only abiding place. It cannot be that our life is a bubble cast up by the ocean of eternity, to float a moment upon its waves and sink into darkness and nothingness. Else why is it, that the high and glorious aspirations which leap like angels from the temples of our hearts, are forever wandering about unsatisfied ? Why is it that the rainbow and the cloud come over us with a beauty that is not of earth, and then pass off and leave us to muse upon their faded loveliness ? Why is it that the stars which 'hold their festivals round the midnight throne,' are set above the grasp of our limited faculties—forever mocking us with their unapproachable glory ? And finally, why is it that bright forms of human beauty are presented to our view, and then taken away from us, leaving the thousand streams of our affections to flow back in Alpine torrents upon the heart ? We are born for a higher destiny than earth—There is a realm where the rainbow never fades, and where the stars will be spread out before us like islands that slumber on the ocean, and where the beautiful beings which here pass before us like visions, will stay in our presence forever.

Cure for the Whooping Cough.—Take one fourth of a pint of sweet olive oil, the same quantity of common leeks—cut them fine, and simmer them moderately, two or three hours ; and honey sufficient to make it palatable ; half a table spoonful a portion for an adult. If taken four or five times it will, in a few days, remove this distressing disorder.

How to make Coffee as the French make it.—Have a coffee pot with a lip ; pour into it as many cups of boiling water as you wish to make cups of coffee ; let the water boil, then put in as many table-spoonsfull of coffee as there are cups of water, stir it, and let it simmer till the bead falls. When the coffee is done, take it off the fire, pour in a cup of cold water, set the coffee on the hearth, and let it stand ten minutes, when it will be fine. For breakfast, put one cupfull of this coffee to three or four cups of boiled milk, and sweeten to your taste, and you will find it a luxury at a small expense, as great as wealth can procure.—*Household Almanac.*

CONTENTS OF THIS NUMBER.

Clover with oats—Notice of a writer on mixed crops—Great yield of Corn—Increase of Manures—Agricola on mixed crops—Robinson on grasses—Experiment on the culture of Irish potatoes—New mode of raising Sweet Potatoes—A new Hedge plant—Cultivation of the Peach Tree—Culture and mode of cooking Tomatoes—Culture and method of dressing the Cauliflower—Uses of Horses and Oxen—Colts, Cattle, Sheep and Hogs, running at large—Productive Cow—Barn-yard Hog—Pen—Russian manner of growing and curing Hemp—Value of Hops in diseases of the skin—Virtue of chloride of lime in tetters, &c.—Domestic Summary—Foreign Abstract—Answer to "My life is like the summer rose"—Woman's feelings and sorrows compared with man's—Beautiful extract—Cure for the whooping-cough—French mode of making Coffee—Prices Current—Advertisements—Terms of the paper.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,	bushel.	2 50	
CATTLE, on the hoof,	100lbs.	7 50	8 00
Slaughtered,	"		
CORN, yellow,	bushel.	83	85
White,	"	sales	85
COTTON, Virginia,	pound.	17½	18
North Carolina,	"		
Upland,	"	18½	20
FEATHERS,	pound.	37	40
FLAXSEED,	bushel.	1 37½	1 50
FLOUR & MEAL—Best wh. wh't fam.	barrel.	7 25	7 75
Do. do. baker's,	"	6 75	7 25
Do. do. Superfine,	"	6 00	6 25
Super Howard street,	"	6 00	6 12
" wagon price,	"	5 75	6 00
City Mills, extra,	"		
Do.	"	6 00	6 12
Susquehannah,	"	6 00	
Rye,	"	4 62½	4 75
Kiln-dried Meal, in hhd.	hhd.	19 00	
do. in bbls.	bbl.	4 25	
GRASS SEEDS, red Clover,	bushel.	5 00	5 25
Timothy (herds of the north)	"	2 50	3 00
Orchard,	"	none	
Tall meadow Oat,	"	2 00	2 50
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.	18 00	20 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
HOGS, on the hoof,	100lb.	6 00	6 75
Slaughtered,	"		
HOPS—first sort,	pound.	12	
second,	"	10	
refuse,	"	8	
LIME,	bushel.	33	35
MUSTARD SEED, Domestic,	"	5 00	6 00
OATS,	"	45	52
PEAS, red eye,	bushel.		
Black eye,	"		1 25
Lady,	"		
PLASTER PARIS, in the stone,	ton.		3 12½
Ground,	barrel.	1 37	
PALMA CHRISTA BEAN,	bushel.	2 00	
RAGS,	pound.	3	4
RYE,	bushel.	92	95
Susquehannah,	"	95	96
TOBACCO, crop, common,	100 lbs	4 00	5 00
" brown and red,	"	5 00	7 00
" fine red,	"	7 00	9 00
" wrappery, suitable	"		
" for segars,	"	6 00	12 00
" yellow and red,	"	8 00	12 00
" yellow,	"	9 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	4 00	5 00
" ground leaf,	"	5 00	9 00
Virginia,	"	5 00	10 00
Rappahannock,	"		
Kentucky,	"	6 00	9 00
WHEAT, white,	bushel.	1 32	1 37
Red,	"	1 25	1 35
WHISKEY, 1st pf. in bbls.	gallon.	37	38
" in hhd.	"	37	dull
" wagon price,	"	33	
WAGON FREIGHTS, to Pittsburgh,	100 lbs	1 12	
To Wheeling,	"	1 50	
WOOL, Prime & Saxon Fleeces,	pound.	62 to 75	26 to 28
Full Merino,	"	52	62 24 26
Three fourths Merino,	"	45	52 23 24
One half do.	"	40	45 23 24
Common & one fourth Meri.	"	35	40 22 24
Pulled,	"	38	40 23 26

A BAKEWELL BUCK.

WANTED for an extensive agriculturist in the north, a Buck of the BAKEWELL breed of Sheep, to supply the place of one which has recently died. He must be a first rate animal, of the purest blood, and of fine points. For such an one, a liberal price will be paid. Application to be made to the editor of this paper. je 2

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.		
BACON, hams, new,	pound.	11½	
Shoulders,	"	10	10½
Middlings,	"	10	10½
BUTTER, printed, in lbs. & half lbs.	"	20	31½
Roll,	"	20	22
CIDER,	barrel.		
CALVES, three to six weeks old,	each.	3 00	6 00
COWS, new milch,	"	17 00	30 00
Dry,	"	8 00	12 00
CORN MEAL, for family use,	100lbs.	1 85	1 87
CHOP RYE,	"	1 87	1 94
EGGS,	dozen.		12
FISH, Shad, No. 1, t'd 7 50; untr'd	barrel.	7 25	
Herrings, salted, No. 1,	"	firm	4 50
Mackerel, No. 2&3, none; No. 1,	"	do	7 25
Cod, salted,	cwt.	2 25	2 75
LAMBS, alive,	each.		
Slaughtered,	quart r		
LARD,	pound.	9	10
ONIONS,	bushel.		100
POULTRY, Fowls,	dozen.		
Ducks,	"		
POTATOES, Irish,	bushel.	62½	67½
Sweet,	"	1 25	1 50
TURNIPS,	"		
VEAL, fore quarters,	pound.		
Hind do.	"		

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	VIRGINIA.
U. S. Bank,	par
Branch at Baltimore,	do
Other Branches,	do
	MARYLAND.
Banks in Baltimore,	par
Hagerstown,	¾a
Fredrick,	do
Westminster,	do
Farmers' Bank of Mary'd,	do
Do. payable at Easton,	do
Salisbury,	uncertain
Cumberland,	¾a
Millington,	do
	DISTRICT.
Washington,	do
Georgetown,	do
Alexandria,	do
	PENNSYLVANIA.
Philadelphia,	¾a
Chambersburg,	¾a
Gettysburg,	do
Pittsburg,	1¾a2
York,	¾a
Other Pennsylvania Bks. 1¾a2	do
Delaware [under \$5],	¾a4
Do. [over 5],	¾a1
Michigan Banks,	5a
Canadian do.	5a

FLOWERS.—The citizens of Baltimore and others, are hereby informed that the Rose Plants at our Nurseries are now in full bloom; a very extensive assortment of almost every shade, from pure white to dark purple, or what is termed black, amongst them are the much and deservedly celebrated Greville Rose; one plant contains 70 clusters, on one of which we counted fifty rose buds, colors varying from white to dark purple.

In compliance with the request of our friends and customers, we give this notice, in order that those who are desirous of seeing the Roses and other plants and trees in our nursery, may have the opportunity to see and make selections of roses, &c., whilst in bloom, to which they are respectfully invited.

je 9

SINCLAIR & MOORE.

FOR SALE,

A TWO years old three-fourths Devon BULL. He is of fine form and medium size—he has been fed as dry cattle usually are. Having no use for him, his price will be very low—only \$25.

June 9th.

SINCLAIR & MOORE.

DEVON COW AND CALF.

FOR sale, a first rate DEVON COW, five years old this spring, of the best blood and most beautiful form. She is altogether one of the most perfect animals of her kind, and is in Calf to a first rate Devon Bull. She has also by her side a BULL CALF, two months old, equal in all respects to any other calf of his kind, and age. The price of the two animals is \$200, and they will be delivered in Baltimore. Address

I. I. HITCHCOCK, Philadelphia.

June 9th, 1835.

3t.

FOR SALE,

A DURHAM BULL—Apply at this office.

June 2

LUCERNE SEED.

FOR SALE ON PLEASING TERMS,

500 LBS. fine quality LUCERNE or FRENCH CLOVER SEED. This is one of the most valuable grasses which has as yet been introduced into cultivation in our country, and can be recommended as being particularly adapted to the purposes of soiling, as it is fit for the scythe fully two weeks before the common Red Clover, and can be advantageously cut several times in the course of a season. Persons sowing this species of Clover, should also sow with it half a bushel of Rye, or some other grain to the acre, so as to protect it from weeds the first year, or until it attains its wonted strength and becomes sufficiently matted to smother the weeds. The quantity of seed sown to the acre is 13lbs.

ALSO, SCARLET CLOVER, or Trifolium incarnatum, a very early sort, possessing many advantages.

St. FOIN, and BURNET GRASS seed, both highly spoken of for culture in high, dry soils, as improvers of land—which, together with

RUTA BAGA TURNIP, WHITE FLAT, YELLOW BULLOCK, EARLY DUTCH, and many other sorts, all of the best varieties of Turnip Seeds, for field and garden culture, are confidently recommended as of the very first quality, being selected with great care, and due regard paid to their freshness.

R. SINCLAIR, Jr.

At Seed Store connected with this Office.

June 2.

THE Subscriber has just received by the ship Canada a splendid assortment of English and Dutch Garden and Field Seeds. The respectability of the gentleman by whom these seeds were raised warrants me in recommending them with perfect confidence. But to be certain of the quality and to prevent disappointment to purchasers, proof samples of each sort are taken and will be fully tested in hotbeds prepared for the purpose.

ROBERT SINCLAIR, Jr.

At Sinclair & Moore's Maryland Agricultural Repository, Light near Pratt street.

March 3.

FOR SALE,

A BROOD MARE about 15 hands high, color black, fine form and action. Apply at this office.

TERMS OF THIS PAPER.

1. Price five dollars per annum, payable in advance. When this is done, 50 cents worth of any kind of seeds on hand will be delivered or sent to the order of the subscriber with his receipt.

2. The manner of payment which is preferable to any other for distant subscribers, is by check or draft on some responsible party here, or else by remittance of a current bank note; and to obviate all objection to mail transmission, the conductors assume the risk.

3. Subscriptions are always charged BY THE YEAR, and never for a shorter term. When once sent to a subscriber the paper will not be discontinued (except at the discretion of the publishers) without a special order, on receipt of which, a discontinuance will be entered, to take effect AT THE END of the current year of subscription.

4. Subscribers may receive the work by mail either in weekly numbers, or in monthly or quarterly portions; or else in a volume (ending in May annually), handsomely pressed, half bound and lettered (to match with the American Farmer) by such conveyance as they may direct: but the \$5 must in all these cases be paid in advance.

ADVERTISEMENTS relating to any of the subjects of this paper will be inserted once at one dollar per square, or at that rate for more than a square, and at half that rate for each repetition.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 7.

BALTIMORE, MD. JUNE 16, 1835.

Vol. II

THIS publication is the *successor* of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, JUNE 16, 1835.

AGRICULTURAL SOCIETIES—We recently adverted to the law passed by the legislature of Indiana, at its late session, providing for the organization of "*County and State Agricultural Societies*," and we are happy to learn by a late number of the "*Indianapolis Journal*," that the *State Board of Commissioners* have already organized themselves, and addressed a circular to the County Commissioners, Agricultural Societies, and the friends of Agriculture generally. In this circular a form of rules, or articles of a constitution, for the government of the several county societies is given, with a view of producing uniformity. In one of these articles it is proposed, that prizes be annually offered and awarded for *actual improvements*, and *experiments*, and for the best written essays on proposed subjects. And in order to disseminate the knowledge of useful discoveries and improvements in husbandry, the society intend to publish collections of memoirs and observations, selected from such communications as shall be made to them.

We but briefly notice this document at this time, intending hereafter to give it in extenso, believing that it contains many suggestions which may be turned to account in every part of our country, where societies have not been formed. Of the intrinsic value to every community in which an agricultural society may be located, we have never permitted ourself to indulge in a doubt. Improvement on the face of the earth has, as far as our observation extends, always succeeded their creation. A generous spirit of emulation and rivalry, promotive alike of individual and public good, has uniformly followed in their footsteps. In our own immediate neighbourhood, although it is many years since we had a society among us, the evidences of its beneficial influence are still to be seen in every direction, affording cause for

the deepest regret that any considerations should ever have been permitted to exist, to destroy an institution so eminently calculated to confer lasting and substantial benefits upon the individuals composing it, as well as upon the country at large.

The June number of the *American Gardener's Magazine* contains a very interesting article on the subject of *Budding and Grafting* of trees and shrubs. It is copied into that journal, from *Loudon's Gardener's Magazine*. The article itself, as it appears from the introductory remarks which preface it in the latter periodical, is a *translation* by Mr. Loudon, with some additions and variations, from *l'Horticulteur Belge*, and is presented as being more complete than any article which has hitherto appeared on budding and herbaceous grafting, in the English language.

In introducing this article to their readers, the conductors of the *American Gardener's Magazine*, very justly remark, that the propagation and multiplication of the different species and varieties of trees, shrubs and plants, especially kinds of delicate growth, is imperfectly understood in this country. The common methods of grafting and budding have long been in practice, as almost the only means of increasing plants, unless it were those which propagate easily from cuttings, suckers, or division at the roots. The French in this particular greatly exceed the English horticulturists, and are considered very far their superiors in the *multiplication* of plants; this is owing to their knowledge of vegetable physiology, and to the various experiments which they are continually making. We have copied the *first branch* of this article into this number, and refer the reader for it to the *Gardener's* department—the residue on *grafting* we will give in our next.

IMPORTANT TO FARMERS.—A case has been recently decided by Judge *Williams* at *Dedham*, Massachusetts, embracing highly important principles, and affecting the rights of Landlords and Tenants in a manner which render it worthy that the decision should be widely promulgated. The case is a novel one, and goes to settle a most interesting question of law. The facts and circumstances were these:

A creditor of a tenant, attached and removed from the premises the manure made in the ordinary way by him, and also attached and removed a fence procured and erected on the farm by the tenant, at the special request of his landlord, and to be paid for from the rents growing due, at the close of the term. The action was trespass against the officer, for taking and carrying away the property of the landlord.

The defence rested upon two principal points; 1st, that the manure was made by the tenant for his own benefit, and like other personal estate, was attachable; and as to the fence, the agreement between the plaintiff and his tenant was not inchoate to be completed at the close of the term, the property belonged to the tenant, and was liable to be taken to pay his debts.

The Judge considered the points raised in the case of sufficient importance to demand a deliberate opinion, and after mature consideration, decided that if at the time of the attachment the fence was erected under such circumstances as satisfied the jury, that the intention of the parties was, that it should permanently remain, it became a part of the reality, and not a subject of attachment.

As to the manure, the judge laid it down as a general principle, that such as is made on a farm in the ordinary way, is made for the farm, rests upon the soil of the farm, is necessary to the farm, and inseparable from it, and consequently not liable to attachment for tenant's debts. This decision is important to officers, that they may not buy wit too dearly, and particularly to landlords, that they may understand the relation they bear to those who occupy their lands.

THE ANNAT BARLEY—A new and seemingly superior variety of barley, says the editor of the *Quarterly Journal of Agriculture*, has been introduced into Scotland. It is the produce of three years, which were picked by Mr. Gorrie, Annat Gardens, in a field on the farm of Flawcraig, Carse of Gowrie, Perthshire, in the harvest of 1830, since which period it has been sown at Annat Gardens. Hence its name. In bulk of straw it seems to have the advantage of the common and *chevalier* barley, it ripens five days earlier than the former, and about a fortnight before the latter, and is 2½ lbs. heavier than the *chevalier*.

Horticultural exhibitions were held last week in the cities of Washington and Philadelphia, and the displays in each place are highly, and no doubt justly, eulogised by the journalists of those places.

THE FARMER.

BONE MANURE.

Mr. John R. Watson, of Perth Amboy, New Jersey, has communicated to the New York Farmer, a series of experiments which he has made with bone dust as a manure, and which gave the following results: 1st. That its good effects are equally perceptible on a light, and on a heavy loam: 2d. That two rows of corn, planted in drills, manured with it, proved better than two other rows manured highly with hog-pen and yard manure, and two others with fish: 3d. That an acre of grass with 25 bushels of it spread broad-cast, proved superior to any other manured with any other substance he had ever used, and was matured three weeks earlier than any other around it: 4th. 25 bushels of it sowed broad-cast on an acre of oats, proved greatly superior to farm yard manure: and 5thly, he has found it an excellent manure for trees.

In England, bone dust has been long and freely used among agriculturists, and is highly approved as a manure; but we doubt, whether in this country, where land is so plenty and cheap, it can ever be found an object of general use. The difficulty of procuring it here, in sufficient quantities, except in the immediate neighborhood of large cities, must always operate to prevent its introduction into use, to any considerable extent. In situations, however, favorable to full supplies, we apprehend, establishments for the collection of bones, reduction into, and sale of the dust, would prove highly beneficial and profitable. Of the eminently invigorating quality of the powder, there can be no doubt in the minds of those who are aware of the elements of which bones are comprised.

ANIMALIZED CARBON—A NEW MANURE.—A substance of French origin, under the above name, whose manufacture is secured by patent, was introduced into Scotland in 1834, and is highly approved of as an efficient manure. The editor of the Quarterly Journal of Agriculture, says it was discovered by a French chemist; but that it is a substance easily manufactured, may be inferred from the fact that it is shipped free on board for 35s. per ton. Several persons have bought patent rights, and manufactories of it are now established in Copenhagen and Scotland. Its chief excellency is, that it is powerful in its effects, occupies but little room, is easily separated, and conveniently used by hand or drill: its effects are farther, to ensure a rich crop, by gradually meliorating the soil, and rendering fallowing unnecessary. For wheat, rye, buckwheat, barley, and similar descriptions of corn, about 8 cwt. 1 qr. 16 lbs. is

used per acre. It may be either sown broad-cast or drilled in before harrowing. For flax, hemp, beets, potatoes, &c. about $10\frac{1}{2}$ cwt. per acre; and 12 cwt. 2 qrs. 10 lb. per acre for artificial meadows, different sorts of cabbage, rape, culinary plants, and for refreshing natural meadow lands. For plants that are set in rows, a handful is put to each plant; for those which are transplanted, a child follows the planter, and throws a very small handful of the manure into each hole, which is immediately covered over with earth; in several places, for rape, it is scattered out in rows, along the roots of the plant, which the plough covers by forming a new furrow. On meadow land it must be spread out in December or January, when the snow is not on the ground. Generally speaking, it is well to mix this manure with half its quantity of finely sifted earth; but there is no necessity for pursuing this method. On light and warm soils about 2 qrs. 22 lbs. less per acre is used than on cold or clay lands; where an extra 2 qrs. 22 lbs. are added to the quantity as herein-before directed to be used. It is in fact left to the farmer's judgment to make use of the above directions, according to local circumstances. What characterises the manure most, is, that it develops its effects so slowly and gradually, that it may be applied, without danger, in contact with the seed or roots of plants. In this it differs from a number of other manures, which are less rich, but more heating. In Scotland it has been satisfactorily tried on eight different soils: for turnips it was found nearly equal to bone-dust, and has been freely ordered in large quantities from the manufacturer.

Such is the account given of this new agent in husbandry, by the enlightened editor of the Quarterly Journal of Agriculture,—and we must confess our curiosity is not a little excited to see this transatlantic stranger wending its way to our shores. If it possess the meliorating properties ascribed to it, and could be furnished in our country at the price at which it is sold in Europe, it would certainly find ready purchasers; the difference in its favor, in the hauling alone, would make it an object of decided importance. The discovery of some manure possessing the power of fructification in a highly concentrated form, has long been a desideratum with agriculturists, and if this is entitled to the commendation given of it, it will be a very near approximation to the thing desired. Believing that the results of chemical experiments will, as they have already done, confer incalculable benefits upon the cultivators of the soil, we feel much solicitude to see the efficacy of this new means of imparting fertility to the earth, fairly and fully tested with us. Thus impressed, we

hope some *patriotic merchant*, or *wealthy citizen*, will make an importation of a small invoice, in order that an experiment of its virtues may be made. If on trial it should be found to answer, the right to manufacture would very speedily be obtained; for interest, in the absence of public spirit, would raise up sufficient enterprise for that.

IMPORTANCE OF SAVING MANURE.

The importance of observing the most strict economy in saving manure is urged by almost every agricultural writer, and yet though all admit the propriety, nay, necessity, of the thing, but few, comparatively speaking, profit by the advice given them. The subjoined remarks are so full of good sense and sound philosophy, that we feel it our duty to lay it before our readers, in order that the judicious, at least, may avail themselves of the wholesome truths so plainly laid down.

"Confine your cattle," says Mr. Colman, in Hints to farmers of Essex county, "as much as possible, when at home, to your barn-yard; and never suffer them to be in the roads; or to waste the manure at their watering places. In the morning throw the droppings of every night into a heap and cover it with a light coat of soil. It is a better plan to house your cattle every night as much in summer as in winter, unless the weather is extremely hot. In general, if the barn is ventilated they will be as comfortable in doors as out, and in this way your manure heap will be greatly increased. Take care of the contents of your privy, and save the refuse of your sink, by throwing it upon a compost heap, or making the deposit where they can easily be removed. The privy and sink on many farms are most offensive places, and are sometimes so situated that they compel one to think their owners have scarcely made an approach to a state of civilization. We should copy the extreme carefulness of the Chinese and Flemish farmers, who suffer nothing to be lost. A good farmer should look upon manure of every description as money, which he may place at once at compound interest, and the payment is sure. There is no provision of nature, which is adapted more to strike the reflecting mind with grateful astonishment, than that by which the most offensive substances, instead of remaining to pollute the air and destroy the health and comfort of man, are converted into the means of fertilizing the land, and return to bless him in all the varied forms of beauty and utility, in flowers and fruits, and the more substantial products of esculent vegetables and grain. Manures decidedly improve each other by being mixed in compost rather than applied singly. For almost all crops they are of much greater value applied green than kept over the year; and where a farmer cannot form a cellar under his stables, he will find his account in erecting a cheap and rough shed over his manure heap to preserve it from the wind, sun, and drenching rains. The expense of it when attached to the barn need not be great, and will be much more than compensated by the advantages gained by it."

GRASSES—ESSAY NO. 2.

Remarks on Southern Grasses and their culture—and some notice of those cultivated in the New England States, originally addressed to a distinguished agriculturist of Savannah, Georgia, by *Abednego Robinson, Esq.*, through the *Portsmouth (New Hampshire) Journal*.

It is evident that the climate and soil of Georgia, and the south generally, are congenial to the cultivation of many species of grasses. Their habits are and have been, for generations, to cultivate the usual southern commodities, without any intention, I presume, or scarcely a thought of making hay. You have been in the habit of purchasing our hay at a high price; now I think it probable there are grasses to be found if looked for, that your soil and climate would be congenial to, and would probably give you a greater product than we get here—for instance, if the Gama succeeds any thing like what is represented, we can never expect to compete with you. It is not reasonable to suppose from the representations of that grass, that, as it is a native of the south, and its roots very large, if exposed to our severe frosts, it will thrive equally well with us. But, if the Gama has been too highly recommended and should not do to depend on, I have no doubt that there are other grasses that you might cultivate with great success.

There are many species of grass, I have reason to believe, among us, (that are now lying as dormant as the gama has been,) that have been seen often, and passed over without notice, because they have never been known to have been cultivated, and which might be profitably cultivated with you, and better adapted to your soil and climate than to ours: recollect, sir, that if your lands which become worn down by successive culture, instead of being thrown by for a long time to recruit, and left naked to the sun to burn, and the winds to blow the flowers of them away, were grassed immediately over, from the vegetable manure of the top and root of the grass, they could be soon reclaimed. I speak of your barrens, but not as of a certainty, (excuse me if I am in an error)—I draw this inference from what I have heard and seen. I have travelled several times in lower Virginia, and I suppose the States south, bear a great similarity as to climate, soil, and habits of the people. It is certain that there is more or less of light soil, and more or less neglect of husbandry in every country and section. But talking Virginia for a sample, and knowing that grasses are not generally cultivated in the southern states, it is reasonable to suppose, from your mode of culture, that you wear down your lands by excessive cropping, and that you are not in the way of making much manure, and consequently use but little, save plaster, which is not sufficient alone to keep all your lands in good tilth for successive or perpetual cultivation. Therefore, as in Virginia, a considerable part of your lands, it is to be supposed, are worn out, or laid by to rest, and it is certain that they do not recruit so fast when naked as they would do were they to be well grassed over; neither are they as secure from waste; and indeed they never will acquire that rich, loose, bulky, fertile nature, that they do from being well grassed over, swelled up, and rendered

mellow, by the falling of the top as well as from the abundance of roots which are always changing, by old ones decaying and new ones shooting forth. Besides, those lands, which under your present system of culture, are thrown out as waste fields to rest, present to the eye of the observant agriculturist a most sombre and gloomy aspect, and furnish to his mind cause for the most painful reflections. But let us draw upon our fancy for a contrast, that our imagination may, at least, be consoled with something to relieve the cheerless and chilling landscape. All your lands which are cleared, we will suppose are either under cultivation in your usual mode of culture, or in part covered with a fine, rich, and luxuriant growth of grass, waving its lofty heads in the soft and lascivious breezes, the remaining fields well set in grass, but not so tall as the former. On these your beautiful stock of cattle are browsing—the cows which so generously repay you in milk, cream, butter and cheese, and those sheep and lambs, which in meat and wool so amply requite you for your provident care. With what delight then would you turn from the first to the latter prospect—the one the sad reality resulting from an impoverishing system, the other existing only in ideality, but nevertheless within your reach, if you reject not the boon which invites your acceptance.

Such a scene as I have described is a delightful one, and the profits resulting from such a condition of things would be equally great. The pictures I have drawn are highly colored, but they are nevertheless faithful representations of what is, and what *might be*, in every state and section of the Union. You are, perhaps, ready to ask me, can the waste lands of Georgia and the south generally, be brought to the fruitful condition I have depicted? Now your own discernment will save you that trouble—it will tell you that they can be. But there are many others who will ask the question, and how shall I answer them? Why by using the weapon of my countrymen, by asking them another question. Can rail roads be built to connect every city on the seaboard in these United States? Think not this a begging of the question. The accomplishment of the one is as easy as the other, with this difference in your favor, that your exhausted lands can be resuscitated with little expense, whereas the construction of the rail roads will involve heavy expenditures. You, sir, have lately discovered a species of grass called Gama, a native, spontaneous grass of the south, as I am informed, and from the account given of it there is no doubt that it can with proper attention to its culture, be made to produce an effect greatly surpassing any thing I have said. This grass it seems, is peculiarly adapted to light soils that will produce little or none of our grasses which are usually cultivated, and if its product be any thing like the smallest crop that I have yet heard stated, (30 tons to the acre), it will far exceed the figure I have drawn. But if it produces 150 tons, as has been stated and from good authority, it will very far transcend every thing of the vegetable kind, yet known as food for animals, and used for fodder. But if it should produce one ton only to the acre, on our lightest soils, and can be easily cultivated, it would be a valuable acquisition, and every exertion should be used in its propagation, that our barren farms and

sterile spots on good farms, may thereby be made fruitful, and wear a better and more grateful aspect.

But, Sir, I have my fears that our climate will not be congenial to it: that it will not withstand our severe frosts—the thermometer has already fallen this season ten degrees below zero. We believe that moist ground is not congenial to it, especially boggy, therefore it will not answer every purpose as grass. With you it may fail to answer the same purposes in every particular: as to grazing it close in pasture, I have not heard any thing about it, but presume it will not bear close feeding at all: we should not think that we are confined to this grass only; there may be other native grasses, if sought for and brought under cultivation, which might be preferred to this, especially in many cases, for low ground, for pasture, the finer fodder, &c.

The grasses usually cultivated in our fields, and most valued, will not bear close feeding in pasture, and endure. Among those most esteemed for field culture is herd's grass, so called here, in Pennsylvania it is timothy. It is the finer, downy kinds only that withstand the unnatural usage of continual cropping and treading, and exposure to our severe and frequent frosts; to enumerate them, a fine species of red top wire grass, and white clover, are the principal, the first far the most abundant.

There are several species of grass that are somewhat new in culture here, and which have been in their introduction highly recommended, namely, Lucerne, Cock's Foot or Orchard Grass, Tall Meadow, Oat Grass, Rye Grass, &c. But after a sufficient test, we find their culture with us cannot be made profitable, their nature being too delicate for our climate. It is the tall Oat Grass only among these, that I have any hope of finding profitable.

AEDNEGO ROBINSON,
Of Portsmouth, N. H.

THE LAWTON HYBRID—A NEW TURNIP—The Quarterly Journal gives an account of a new and valuable turnip for field culture, raised by Mr. James Wright, of Lawton, Strathmore, Perthshire, Scotland. The variety is a *Hybrid* between the green-topped Swede and the green-topped white globe. It is represented as a white turnip with a green top, possessing the advantage of being hardier, and yielding a greater crop, than any other of the white turnips at present cultivated in the fields.

Salve for Burns.—Take 4 oz. of the inner bark of the elder tree, 2 oz. clean beeswax, 1 pint of linseed oil, 2 oz. of mutton suet, 2 oz. of sheep cloves, 1 gill of spirits of turpentine—stew the whole over a slow fire for an hour, then strain and add 1 oz. of white lead, mix well together until the whole cools, and you have one of the best liniments ever applied to a burn or scald.

Healing Salve.—Take 4 oz. beeswax, 2 oz. crude turpentine, 4 oz. mutton suet, 2 gills sweet oil, 4 oz. life everlasting, 1 gill spirits turpentine, simmer the whole over a slow fire for an hour, strain, &c.

[From the New England Farmer.]

CULTURE OF CORN.

Mr. Fessenden—About two years since I gave you some account of two experiments in planting corn. The result of one went to show that our cornfields do not usually have a sufficient stock of plants; and the other, that nothing is gained by giving the hills a greater distance one way than the other. On the latter point perhaps the practice of farmers in this vicinity is different from that of others. Here we see fields planted, with rows from two and a half to three and a half feet distant, and hills from four to six or seven feet distant in the row, thereby making the distance nearly, in some instances, more than double one way than it is the other. The origin or reason of the practice I have never learned, but see no objection to it, except the additional labor necessary in cultivation. I believe it is moderately getting out of use. Respecting the first, that of stocking the ground, I have since made further experiments both in regard to distance between hills, and number of stalks in a hill, and if you think its details may be useful or interesting to your readers, it is at your service.

Corn is usually planted here in hills, and the general impression among farmers, I believe, is, that without reference to the distance between hills, it is a matter of little consequence whether there be three or four stalks in a hill. Perhaps the majority prefer four stalks, yet some good farmers give the preference to three, and three are probably as many as our cornfields will usually average, if the missing hills are taken into the account.

The ground selected for the experiment, was a light sandy loam, that had been in pasture perhaps thirty years. After ploughing and rolling, about twenty cart buck loads to the acre, of coarse barn-yard manure, were spread on the furrows and harrowed in. Five parcels of ground, of three rows each, were then laid out at several distances, of 2 feet 6 inches, to 2 feet 9 inches, 3 feet, 3 feet 3 inches, and 3 feet 6 inches, each parcel separated by an intermediate row, to prevent the necessity of resorting to an average on the outside rows, in calculating the product of the ground per acre. The distance between the hills in the row, was in all cases equal to the distance between the rows of the same parcel; and in each parcel one row was to have three, one to have four, and the other to have five stalks in a hill. The rows about twelve rods in length, were laid out, and the hills marked off at exact distances, with little trouble, by means of a simply constructed gage. The corn planted was an early twelve rowed kind, called the Golden Sioux. Six to eight kernels were put in a hill, and the stalks afterwards pulled out to the requisite number; in all cases leaving the best ones standing, which gave some advantage in the selection, to the hills of smallest number. The intermediate rows, and those on either side, had generally about four or five stalks in a hill, with hills at distances to correspond nearly with their neighbors. In the selection of soil, manuring and cultivating, all were supposed to have an equal chance. The ground was kept level, and sowed with grass seed the last time of hoeing.

When harvested, the produce of each row was

carefully weighed in the field, and noted down immediately, and seventy pounds of dry well ripened ears estimated to make a bushel of shelled corn.

The following table will show the order in which the rows were planted, and perhaps will exhibit the method pursued and the result, better than can be done by description; and also afford opportunity to detect any error that may have been admitted in the estimates.

No.	Distance.	Ground to each hill	Hills per acre.	Hills in row.	Stalks in hill.	Product of row.	Product of hill.	Shelled corn per acre.
1	2 ft. 6 in.	6 ft. 3 in.	6970	80	3	47 lbs.	9 oz. 6 3/4 dms.	54 bush. 44 p.
2	"	"	"	"	4	49 "	9 " 12 3/4 "	56 " 67 "
3	"	"	"	"	5	52 1/2 "	10 3/4 "	60 " 74 "
4*	2 ft. 9 in.	7 ft. 6 1/2 in.	5760	72	3	48 1/2 "	10 " 19 3/4 "	51 " 56 "
5	"	"	"	"	4	53 "	11 " 12 3/4 "	56 " 41 "
6	"	"	"	"	5	55 "	12 " 3 1/4 "	58 " 48 "
7	"	"	"	"	3	48 "	11 " 10 1/4 "	46 " 70 "
8*	3 ft.	9 ft.	4840	66	4	54 1/2 "	13 " 3 3/4 "	53 " 20 "
9	"	"	"	"	4	54 1/2 "	13 " 3 3/4 "	54 " 56 "
10	"	"	"	"	3	48 "	11 " 10 1/4 "	46 " 70 "
11	"	"	"	"	4	54 1/2 "	13 " 3 3/4 "	53 " 20 "
12*	"	"	"	"	4	54 1/2 "	13 " 3 3/4 "	54 " 56 "
13	3 ft. 3 in.	10 ft. 6 1/2 in.	4124	63	3	43 "	11 " 7 1/4 "	39 " 31 "
14	"	"	"	"	4	48 1/2 "	12 " 15 "	44 " 34 "
15	"	"	"	"	5	55 "	14 " 10 3/4 "	50 " 30 "
16*	"	"	"	"	3	43 "	11 " 7 1/4 "	39 " 31 "
17	3 ft. 6 in.	12 ft. 3 in.	3556	57	4	46 "	12 " 14 3/4 "	35 " 18 "
18	"	"	"	"	4	55 "	15 " 7 "	45 " 56 "
19	"	"	"	"	5	56 "	15 " 11 "	46 " 43 "

* Intermediate or dividing rows.

It will be seen in every case that the hills of three stalks produced less than those of four, and those of four less than those of five. In this view it may be considered as five experiments, all giving the same result, notwithstanding some of the hills occupied but about half the quantity of ground usually given them in our field culture.

The average of five rows, one from each parcel, is as follows, viz :

Three stalks in a hill, 46 bushels 14 lbs per acre.

Four do do 52 do 42 do do

Five do do 54 do 20 do do

The difference of average between three and five stalks is 8 bushels 6 lbs. per acre.

It will be seen also, that in every instance but one, or eleven times in twelve, diminishing the distance between the hills increased the product of the ground. The average of each parcel is as follows, viz :

Three feet six inches between the hills gave 44 bushels 14 lbs. per acre.

Three feet three inches, 44 bu. 57 lbs. per acre.

Three feet, 51 bu. 49 lbs. do

Two feet nine inches, 55 bu. 45 lbs. do

Two feet six inches, 57 bu. 36 lbs. do

The difference of product between the average of hills at 2 feet 6 inches, and that of hills at 3 feet 6 inches, is 13 bushels 22 lbs. per acre.

Row No. 17 had the least number of stalks per acre, and gave the smallest product, 39 bushels 18 lbs. The number of stalks in this row per acre, (for there was not one missing), was probably equal to the number usually standing in our fields, and the product would be considered, in common seasons, a fair crop for land and manure of like quantity and quality. Row No. 3 had the largest number of stalks per acre, and gave the largest product, viz: 60 bushels 74 lbs. This difference appears to have been made by the difference in the number of stalks, as is evident from the fact that the produce of the other thirteen rows varied from these, and from each other in different degrees, somewhat according to the number of stalks, and distance of hills, with one exception. No. 14, with hills (of four stalks) at 3 feet 3 inches distant, gave 1 bushel 22 pounds less than No. 18, with hills (of four stalks) at 3 feet 6 inches distance. This exception to the general result is a case in point showing that the same crop is not always and in all cases to be expected even from the same soil, season, and mode of culture; and gives evidence, if such be wanted, that a single experiment should not be relied upon as fully establishing any rule or method of cultivation.

Row No. 17 gave a product equal to 22 bushels 56 pounds per acre more than Row No. 3, or a gain of about sixty per cent., apparently by increasing the number of plants per acre. Perhaps a part of the gain, however, is only in appearance. Most likely a hill with five stalks would extend its roots in search of food somewhat farther than a hill with four or three stalks, and if so, among weaker neighbors it would occupy more than its allotted portion of ground, while they would occupy less than theirs. If this be a cause of part of the difference, it may be difficult to tell how much deduction should be made, (though probably whatever is made should be from the 8 bushels 6 pounds difference of product between three and five stalks), but having the facts before you, Mr. Editor, you or your readers can guess as well as myself, whether after making a liberal allowance for that or any other supposable cause, there was not a large and substantial gain by increasing the number of stalks per acre.

That the gain would have been as great on all other soils, I am by no means prepared to say; indeed, on many I am confident it would not. I apprehend it is only rich and good soil, well adapted to the growth of corn, that will bear thick planting, and poor, light land most certainly will not bear the exhaustion. Thick planted corn also suffers soonest and severest by drought.

I have stated the case perhaps with more minuteness than may be thought necessary, and shall leave it with you, Mr. Editor, to strike out all or any part, as you shall think best.

During the past year much has been said in the Farmer, by way of objection, to large corn cobs—a popular objection, surely—but will you tell us, Mr. Editor, why a large cob is not as good as a small one; or, what is about the same thing, why a long one is not as good as a short one; and whether we may not as well expect to raise beef without bones, as corn without cobs? I have supposed that the larger and longer the ears were, the better, provided the corn was of good quality,

and adapted to the seasons and soil; with these qualifications, far from having seen them too large, I have seldom thought them large enough, and should be very unwilling to assign them a limit. Indeed, I see not why the objections that can be made to large ears of corn should not be made to large ears of rye or wheat, or to the large long frames of "Improved Short Horns." But I may be mistaken; I may misapprehend the subject.

Yours respectfully,

WILLIAM CLARK, Jr.

Northampton, May, 1825.

[By the Editor.]

The above article cannot fail to prove of great utility to the practical farmer; and we think that Mr. Clark has rendered important services to the community of cultivators, by making and publishing the results of the experiments detailed above.

THE GARDENER.

BUDDING.

1. *Escutcheon Budding, without a bud or eye.* The object of this mode of budding is simply to cover a wound or blemish in one tree by the live bark of another. Take from a tree of the same sort, or at least of the same genus, as the wounded tree, a piece of bark rather larger than the wound, and form it into a regular shape; then cut the bark round the wound into the exact form and dimensions of the piece to be inserted, so that the latter may be let into the former with the greatest exactness. The inner bark of the graft and that of the stock being fitted so as to join perfectly all round, and the shield closely adhering to the tree in every part, it is kept on by a ligature; and the edges of the wound are covered with grafting-wax or clay. It is a remarkable fact, which some are, perhaps, not aware of, that the wood formed under a piece of bark inserted in this manner, even though that bark be without a bud or eye, will be the wood of the tree from which the shield was taken. In this way several different kinds of wood might be formed on one tree, without introducing a single leaf belonging to those different woods. The portion of wood introduced will always be limited in diameter to the size of the portion of bark put on.

2. *Budding with a bud or eye, and a circular Escutcheon.*—With the point of a grafting-knife, or rather with that of a penknife, cut a small bud out of the tree to be propagated, leaving a narrow rim of bark round it, and taking at the same time, a portion of the wood, which is retained. A hole is made in the stock, of the same size as the bud and its rim, and of a depth equal to the length of the piece of wood left on. The whole is adjusted so that the bud, with its bark and wood, fills up the wound exactly; and the edges are then covered with grafting-wax. This mode of budding is employed to equalize the flower-buds over a tree, by removing some, from where there are too many, to those parts of the tree where there are too few.

3. *Escutcheon Budding with wood under the bark.*—To procure the escutcheon, a deep and transversal incision is made above a healthy and vigorous bud; then, by drawing the blade of the grafting-knife, and entering it rather higher than

this cross cut, a narrow strip of bark, three or four lines broad, by 1 in. or $1\frac{1}{2}$ in. long, is taken away, terminating in a point at the bottom. The eye should be situated about a third from the top, and the stipules or other appendages that sometimes accompany the petiole, as well as prickles, &c., must be taken off with caution. With the point of the grafting-knife, the wood of the escutcheon is then taken out, leaving a small piece immediately under the eye, and about a third of the length of the escutcheon. The bud, thus prepared, is inserted in the stock, and then tied as before. This mode of budding is that most generally used in European nurseries.

4. *Escutcheon budding, with a growing bud.*—The escutcheon is cut and placed in the same manner as by the preceding method; but, as soon as it is inserted, the head of the stock is cut off, and all the buds that push from it, except that from the escutcheon, are rubbed off as they appear. This mode of budding, when done in the spring, has the great advantage of forcing the bud to develop itself immediately, thus gaining a year. However, it sometimes happens that if the bud does not take, the sap of the stock not being able to find a channel, from all the shoots being rubbed off as they appear, the stock, or at least a great part of its length, dies of repletion. When done in the month of August, this mode of budding seldom succeeds, because the young shoot, not having time to ripen, perishes with the frost, and often cause the death of the stock.

5. *Escutcheon budding, with a dormant bud.*—This mode is similar to the preceding; but it is performed in August, and nothing is cut away from the stock till the following spring, in order to prevent the development of the bud before that season. Though longer before it takes effect, this mode of budding is more certain to succeed than the preceding method. It has also the merit of not hurting the stock, if it does not take. The inhabitants of Vitry, who carry on the greatest commerce in fruit trees in the neighborhood of Paris, use it almost exclusively. This mode is that generally used in the British nurseries.

Escutcheon budding, without the wood.—According to this mode, all the wood is taken away except a speck immediately under the bud; to the life of which bud, however, that speck is essential. The rest of the process is as usual. Besides being very suitable for orange trees, this mode of budding is used for all trees having hard wood, such as myrtles, hollies, and all analogous species, whether indigenous or exotic. It can be done either with the growing bud or dormant bud.

7. *Escutcheon, budding with Pincers.*—A pair of pincers ought to be made on purpose, with which a piece of bark is taken off the stock. With the same instrument, or with the blade of the grafting-knife, an escutcheon or plate of bark, having a vigorous eye in its centre, is taken off a young shoot, of the tree to be propagated. It must be exactly of the same size as the wound made in the stock, in order to fill it with the greatest precision. When it is properly fixed, it is supported by means of grafting-wax or soft-wax. This method is excellent for budding old trees, the thick and rugged bark of which is not suitable for the ordinary modes.

8. *Escutcheon budding, with the eye turned downwards.*—The escutcheon is cut in such a manner that the point of the eye, when placed on the stock, is turned downwards, whether the incision in the stock is made in the usual manner, or like a T reversed, thus, . By this method, the buds are forced to grow in a direction opposite to that which they would have taken naturally; but they soon resume their usual position; and the desired end, viz. that of increasing the size of the fruit by stagnating the returning sap, is thus by no means attained.

9. *Reversed Escutcheon budding.*—The escutcheon is prepared in the form of a triangle; but instead of bringing it to a point under the eye, it is pointed above it. It will be perceived that the incision in the bark of the stock must also be reversed; that is to say, instead of being in the form of an upright T, it must be like a T turned upside down. To effect this, the longitudinal incision is made above the transversal one, instead of making it below it. It is finished with ligaments and grafting-wax, as the preceding modes. In comparatively cool and moist climates, like that of Britain, the grafting-wax may be dispensed with in such cases as this and the three or four preceding ones. This manner of budding is almost the only one used in the south of Europe, particularly at Geroa and at Hieres, to multiply orange trees. It is also suitable for the propagation of trees having abundant and gummy sap; and it might probably be advantageously employed to secure the success of buds on resinous trees.

10. *Budding resinous Trees.*—An incision is made in the form of T, as if for any ordinary bud, in the bark of the stock. A double incision is then made obliquely, about two lines or two lines and a half from the upper part of the T: this incision should penetrate the bark to the thickness of nearly a line, or so as to reach the soft wood. This mode of budding succeeds not only on resinous trees, but also on all those that have a gummy and very abundant sap.

11. *Covered budding.*—The bud is prepared as usual; but, when it is inserted in the stock, instead of a ligature, the lines of junction are covered with grafting-wax; a piece of bark is then taken from another tree, and, a small hole being made in the middle of it, it is placed on the escutcheon, bud, which appears through the hole. A bandage is then put over the bark to keep the whole together. This mode of budding is rather too intricate for ordinary purposes; but it may be worth adopting for rare and delicate trees.

12. *Budding with a square Escutcheon.*—Three incisions are made in the stock, one transversal, and the two others longitudinal, beginning on each side of the horizontal one, and descending perpendicularly four or five lines. They are to be four or five lines apart, and to represent a long square, the bottom line of which is wanting. This square strip or plate is raised and turned down. A square escutcheon, provided with a good eye, is then cut from a branch of the tree which is to be propagated, exactly of the same size as the plate stripped down the stock; and it is applied to the incision, which it must cover

with the greatest exactness. This being done, the plate of bark, which was hanging down on the stock, is raised, and the escutcheon covered up to the eye; the line of junction is then coated with grafting-wax, and the whole is tied like other buds. It appears that this mode of budding was much used formerly, and that it succeeded perfectly: but, as it is rather tedious in the execution, it is now seldom employed.

13. *Escutcheon budding, with a portion of terminal buds.*—A piece, measuring six or eight lines in length, cut from the top of a branch, is split in two, dividing the terminal bud exactly in the middle. An incision is then made in the stock in the form of a T, and the half bud is inserted into it in the usual manner. In case of need, the terminal eye might be divided into four equal parts. The growing bud ought to be used to insure success, though this mode will sometimes succeed with a dormant bud. This method may be very useful, if the tree to be propagated has no young side shoots strong enough to admit of a bud being taken from them. It is particularly suitable for rare trees, with scaly buds and opposite branches.

14. *Annular Flute budding.*—A branch is chosen on the tree which is to be propagated, as thick as, or thicker than, the stock, and a ring of bark, including an eye, is cut from it, and detached by splitting it perpendicularly on one side, and then separating it from the wood by inserting under it the spatula-like handle of the budding-knife. A similar operation is then performed on the stock; that is to say, a ring of bark, exactly of the same size, is detached from the stem in the same manner, but without caring whether there are buds in it or not. In its place is put the ring taken from the branch to be propagated, with the precaution of making the inner barks join together exactly both at top and bottom. No binding is applied; but the whole is covered with grafting clay (*onguent de St. Fiacre*) or grafting-wax. Neither the branches nor the head of the stock are to be cut down till the bud has taken. The two periods most favorable for this sort of budding are, the time of the greatest movement of the sap in the spring, and at the end of its greatest movement in August. This mode of budding has the advantage of never mutilating the stock; because, if it does not take, the bark of the ring supplies the place of that taken away. It is not only suitable for the propagation of walnut trees, but also for the increase of all rare trees with hard wood, such as the American oaks and chestnuts.

15. *Split Flute Budding.*—The only difference between this and the preceding mode is, that, if the ring of bark containing the bud is larger than the space prepared for it on the stock, a piece must be taken from it longitudinally, so as to make it fit exactly.

16. *Flute Budding by close contact, Tube Budding.*—The head of the stock being cut off, a ring of bark, 2 in. or 3 in. long, is removed. A shoot is then taken from the tree to be increased, of exactly the same thickness as the stock, and a ring or tube of bark is taken off the thick end, without being split longitudinally, not quite so long as the piece of bark taken off the stock, but provided with two or three good eyes. The tube thus formed is placed upon the stock in the room

of the one taken away, and care is taken to make the two edges of bark join below. The part of the stock which projects over the ring of bark is next split into shreds, and brought down over it all around, so as, when secured by grafting-clay, to keep it in its place. This mode of budding is chiefly employed in the south of France for propagating walnuts, chestnuts, figs, mulberries, and other trees with thick bark and abundant pitch.

17. *Common Flute budding.*—The head of the stock is cut off; but, instead of removing a ring of bark, as in the preceding mode, it is cut longitudinally into four or five strips, each 2 in. or 3 inches long, and turned down, being left still attached to the tree. From a shoot of the tree to be propagated, a tube of bark is taken, furnished with four or five eyes, rather shorter than the strips, though longer than in tube budding. When the tube of the scion is slipped on the stock, the strips of bark are raised over it, and fastened at the top by a ligature. This method of budding is in very general use both in France and Germany.

18. *Flute Budding in Shreds, with the stock cut obliquely.*—This is nothing more than the mode above described, with the end of the stock cut obliquely, instead of being left to be afterwards cut into shreds and turned down over the tube of bark, as in tube budding.

THE BREEDER & MANAGER.

[From the New York Farmer.]

HINTS ON SHEEP HUSBANDRY.

It is obvious, that housing sheep at night, and providing them, during the day, a shelter from the rain and sun, must preserve and improve the wool; and also essentially conduce to the health, comfort, and preservation of the animal.

I would have sheep winter fed, to the degree of commencing the grass season in good store order, and without having sustained any check, in carcass or wool; and winter sheltered in yards or sheds, as much as the sheep may themselves affect, throughout even the mildest climates of Britain, for neither merino, nor half breed merino lambs, nor indeed those of any other breed, ought to be exposed without some kind of shelter, to the rigors of the winter and early spring; and the sheep when arrived at their maturity or full strength, will require the same, with regular and good feeling if it be intended to force the growth of their fleece, to its utmost weight, and to preserve the quality in its highest degree of condition and fineness.—*Lawrence.*

One of the completest sheep yards I have seen is that which Mr. Thurlow has made at Gosfield, partly by means of stubble stalks, but the space well enclosed; a large flock may be under cover or exposed, at their pleasure. In the centre is a thick stubble stack, which forms a double shed. He finds it of incomparable use, inasmuch as he intends to convert all the straw of his large farm into dung, and to leave off buying bullocks for that purpose.—*Arthur Young.*

The late Gen. Murray's standing folds were equally well contrived, enclosing an area of 57 yards in length, and 20 broad, containing 1,140

square yards. Above 700 ewes were folded in it at night, and for that number it is more than a yard and a half for each sheep. All around it was a shed nine or ten feet wide, and also across the middle which latter was open on both sides. A rack for hay, placed against the wall, which was boarded, surrounded the whole; and another, which was double, to be eaten out on both sides, stood along the central shed; under the rack was a small manger, in which the food was given.—*Id.*

A cool moderate temperature is more favorable to the production of fine wool, than excessive heat; and were the sheep of Spain, like those of England, unprotected against the effects of climate, I should have no hesitation in saying, that the situation of that country would be, in some respects, worse than that of our own island, and more unfriendly to the growth of a fine staple. But to the other qualities, the soundness and softness of the fibres, our frequent rains are very prejudicial, unless the sheep be sheltered and protected from their effects.—*Bakewell.*

To preserve all the best qualities of wool in the Spanish breed of sheep, it will be necessary to attend to the three following objects: The first in importance, is the purity of the breed. The next, that the fleece be covered by nature with a copious yolk, or being deficient that it be supplied by art; nor should the unctuous covering of the wool be absorbed by a mixture with the soil on fallows, washed away by the rain. Lastly, that the sheep be kept dry, sheltered from the extremes of heat and cold, and their quantity of nourishment regulated.—*Id.*

The bad effects of water upon the pile, while growing, may be owing to the readiness with which it mingles with the yolk, and carries off a quantity of that animal soap, which is so necessary to the good quality and even existence of the fleece; for if care be taken to prevent this, by the skilful application of tar mingled with butter, which acts as repellants to the water, the wool part of the staple which grew after the mixture was applied, contains a sufficient supply of rich and nutritious yolk, and is a much superior sort of wool to those parts of the pile which have been exposed without protection, to the dripping wetness of the wintry season.—*Luccock.*

Mr. Bakewell is so fully convinced of the utility of greasing, that he advises it immediately after shearing, and again in October. In his opinion, the trouble and expense of it, twice a year, will be well repaid by its beneficial effects upon both the carcass and fleece of the sheep, in every part of Britain. He observes, by the first greasing, the wool will be covered and defended from the action of the soil, when the particles are most pulverized and active, and it will be kept soft and moist during the parching heat of July and August; and that he has reason to believe, that the top of the staple of a greased fleece would not become harsh and discolored, which is frequently the case with English wool. Additional and very powerful inducements to spring and summer greasing, are the following: The ointment destroys the sheep tick, and has a tendency to prevent cutaneous distempers, and to preserve sheep from the stroke of the fly. Farther, a considerable quantity of wool will be saved, which is torn

off by sheep when rubbing themselves, in order to allay the irritation of the skin, occasioned by those causes. The ointment resists the action of the moisture more powerfully than could the natural yolk of the wool; and Mr. Bakewell gives an example of the superior warmth and dryness apparently enjoyed by greased sheep, on the mountain sides, where greased and ungreased browsed together.

The following is given as the Northumberland preparation: From 16 to 20 pounds butter are placed over the fire and melted; a gallon of tar is then added, and the mixture is stirred until the two substances are well incorporated, and form a soft tenacious ointment. The care always necessary in the application of ointments to the sheep, is especially so in this case; for, says Mr. Bakewell, *if the ointment be merely rubbed on the wool, it collects on the top of the staple, attracts and mixes with the soil, and is rather injurious than beneficial to the fleece.* The staples of the fleece are to be divided with one hand, and the ointment applied to the skin with the finger of the other hand, by which means the ointment is softened by the warmth of the skin, and equally diffused throughout the fleece. The quantity required will in course vary with the size of the sheep, but generally, and in the lighter mode of greasing, one gallon of tar and twenty pounds of butter will be sufficient for forty or fifty sheep.—*Lawrence.*

An unfavorable change takes place on shorn wool, kept long in a very warm and dry temperature; the fibres become indurated, rigid and elastic, and acquire the properties of the hard wools. The greater the degree of warmth, the more speedily will the effect be produced. Wool which has been shorn three or four years, will not spin or fill so well as when kept only one year. A dry situation is necessary for the preservation of wool, which however at length loses its natural moisture, and becomes hard, like wool of limestone districts.—*Bakewell.*

Sheared sheep turned into a newly mown pasture, their coats attract the short ends of grass left by the scythe, and remain sticking in the bottom of the fleece, until in the end they are rolled up with it. These, with any dried vegetable particles, such as hay seeds or chaff, falling from the rack into the coat of the sheep, occasion much extra trouble and expense in the manufacture of the wool, since, if left, they would be wrought into the substance of the cloth, whence they may be extracted by holes made, to be afterwards repaired at the fulling mill, or by the fine drawer. Hay in racks, should be upon the level with the heads of the sheep, and the staves by no means too wide apart, since some sheep, particularly the Spanish are the most wasteful animals in the world of their provisions.—*Luccock.*

The wool grower is counselled to place no dependence upon accidental and external circumstances, for the production of good fleeces, but to rely entirely and with confidence upon the properties with which nature has endowed his sheep, the perpetuity of animal properties being scarcely anywhere more strikingly exhibited, than in the certainty and regularity with which the parent sheep convey to their offspring their own distinguished characteristics. Breed is of the utmost

consequence. It is the basis upon which all the improvements of the flock must be founded; the only source of hope, that attempts to produce fine wool will be followed with success. The kind of wool depends entirely on the species of sheep which bears it; and the soil and its products, or other external circumstances, have no other effect than to vary the quality of the sample, the wool itself still remaining true to its species, long, short or mixed. Long and universal experience has established the fitness of heavy, coarse wooled sheep for rich grazing grounds, and marshes, confining the light and short wooled stock to the hills and higher pastures. Nevertheless, fitness and propriety, not absolute necessity, have given birth to such arrangement; since short and fine wool might be grown in the low grounds, and long wool in the upper, with an additional expense of winter keeping.—*Lawrence.*

FOREIGN ABSTRACT.

Advices have been received from England to the 1st May, inclusive. The news from France, with respect to the prospects of our indemnities, are not so favorable as we were induced to believe by the previous arrivals. The difficulty is, however, altogether speculative, being created merely by the opinion of British and French editors, which of course must be taken for what they are worth. Our opinion is unchanged:—we believe still, that the president's message contains, in the disclaimer of intentional menace, the basis of the only "explanation" which should be asked on the one part or given on the other. Our minister, Mr. Livingston, it is said, is to return home in the Constitution. In that we see nothing to alarm our fears; we look upon his return as growing out of circumstances, not necessarily connected with any new difficulties.

THE MARKETS—Havre, April 23. Cottons. Demand animated for U. S. short staple Cottons; advance upon former prices from 2 to 4 centimes per half ko. according to sales and quality. Louisianas 130f. to 166f.; Upland, Mobile and Alabama 139f. to 160f.

London, April 28. Sales at an advance of $\frac{1}{4}$ d. per lb.

Liverpool, April 27. Cotton in good demand. The common kind of American on rather lower terms; but for the better qualities higher rates have been realized. Sea Island from 1d. to $1\frac{1}{2}$ d. per lb. dearer. Sea Islands $21\frac{1}{2}$ to 28d.; stained 17d. to 20d. Orleans, 10d. to $13\frac{1}{2}$; Mobile, Alabama and Tennessee $9\frac{3}{4}$ to $12\frac{3}{4}$ d.

Liverpool, April 30. Sales of cotton limited and at a decline of $\frac{1}{4}$ d. per lb.

Still Later.—Since the above was in type other arrivals bring London dates to the 8th, Liverpool to the 9th, and Paris to the 6th May, all inclusive.

The conservative party in England had accomplished a great victory over Lord John Russell, a member of the whig ministry, and leader of the House of Commons. After a very animated election in the county of Devonshire, Mr. Parker, the tory or conservative candidate had succeeded over Lord John Russell, by the following vote: for Mr. Parker, 3,755, for Lord John Russell, 3,128, majority for Mr. P. 627. It is supposed that Lord R. and his friends expended 25,000 dollars in the election.

A duel had taken place between Mr. Morgan O'Connell, son of Daniel, and Lord Alvanley; they exchanged three shots at each other without damage, and other affairs of the kind were on foot between the sons of Daniel O'Connell, and gentlemen in London, growing out of insults to the latter, who it appears is averse to the practice of duelling.

The indemnity bill had not on the 6th May passed the chamber of Peers. The Courier Francais announces that Mr. Livingston had left Paris for America, leaving Mr. Barton as *Charge*; and adds, that if the Peers should pass the bill with the amendment of the Deputies relative to the explanation, that he will also depart for this country, unless he should receive instructions to remain. A proposition is before the chambers to appropriate 20 millions to canals. It is thought the Peers will strike out the clause condemning the explanation.

Advices to the 2d May from Spain, give rather a contradictory account of a severe battle between the forces of the queen and those of Don Carlos, in which the latter were worsted. Don Carlos has expressed his willingness to put an end to the contest upon certain terms, one of which is that the young queen marry his eldest son, in whose favor he proposes to abdicate the crown.

The queen of Portugal has consented to another matrimonial alliance merely to gratify the nation, whose will was expressed through the legislative assembly.

DOMESTIC SUMMARY.

Large fires occurred also last week in New York and Philadelphia.

Edward F. Gay, the Engineer in charge of the survey of the route of the contemplated canal from Columbia, Pa., to the tide waters of the Chesapeake, estimates the entire cost of that great work at \$1,817,587.

A very elegant military company arrived here on Thursday last from Boston, on their way to Washington. They are called the Boston Fusiliers, and are in truth a fine looking and well disciplined body of men. They are accompanied by a band, of whom it is but justice to say, they "discoursed most eloquent music."

Commodore John D. Henley, of the U. S. Navy, a native son of Virginia, and a most chivalrous and high-minded officer, died at Havana, on the 25th May, and was interred at Pensacola on the 29th of the same month, with all the honors due to his rank.

The journeymen carpenters and cordwainers in Philadelphia have turned out for higher wages.

CONTENTS OF THIS NUMBER.

Notice of certain Agricultural Societies—Notice of a chapter on the most approved system of Budding—Important decision concerning the relative rights of Landlords and Tenants—The Annat Barley, a new variety—Notice of Horticultural Exhibitions—Notice of certain experiments with Bone Manure—Notice of Analyzed Carbon, a newly discovered Manure—Remarks on the Importance of saving Manure—Essay on Grasses—A new variety of Turnip—Recipes for Salve for Burns—For a healing Salve—Experiments in Corn Culture—New and approved methods of Budding—Hints on Sheep Husbandry—Foreign Abstract—Domestic Summary—Prices, &c.—Advertisements.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,	bushel.	2 50	—
CATTLE, on the hoof,	100lbs.	7 50	8 00
Slaughtered,	"	—	—
CORN, yellow,	bushel.	95	1 00
White,	"	95	1 00
COTTON, Virginia,	pound.	17 1/2	18
North Carolina,	"	—	—
Upland,	"	18 1/2	20
FEATHERS,	pound.	37	40
FLAXSEED,	bushel.	1 37 1/2	1 50
FLOUR & EAL—Best wh. wh't fam	barrel.	7 50	8 00
Do. do. baker's,	"	7 00	7 50
Do. do. Superfine,	"	6 50	6 75
Super Howard street,	"	6 50	6 62
" " wagon price,	"	6 44	6 50
City Mills, extra,	"	—	—
Do.	"	6 50	6 62
Susquehannah,	"	6 50	—
Rye,	"	4 87	5 00
Kiln dried Meal, in hds. hhd.	19 00	—	—
do. in bbls. bbl.	4 25	—	—
GRASS SEEDS, red Clover,	bushel.	5 00	5 25
Timothy (herds of the north)	"	2 50	3 00
Orchard,	"	none	—
Tall meadow Oat,	"	2 00	2 50
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.	18 00	20 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
HOGS, on the hoof,	100lb.	—	—
Slaughtered,	"	—	—
HOPS—first sort,	pound.	12	—
second,	"	10	—
refuse,	"	8	—
LIME,	bushel.	33	35
MUSTARD SEED, Domestic,	"	5 00	6 00
OATS,	"	50	53
PEAS, red eye,	bushel.	—	—
Black eye,	"	—	1 25
Lady,	"	—	—
PLASTER PARIS, in the stone,	ton.	—	3 50
Ground,	barrel.	1 37	—
PALMA CHRISTA BEAN,	bushel.	2 00	—
RAGS,	pound.	3	4
RYE,	bushel.	1 00	1 02
Susquehannah,	"	1 05	1 07
TOBACCO, crop, common,	100 lbs	4 00	5 00
" brown and red,	"	5 00	7 00
" fine red,	"	7 00	9 00
" wrappery, suitable	"	—	—
" for segars,	"	6 00	12 00
" yellow and red,	"	8 00	12 00
" yellow,	"	9 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	4 00	5 00
" ground leaf,	"	5 00	9 00
Virginia,	"	5 00	10 00
Rappahannock,	"	—	—
Kentucky,	"	6 00	9 00
WHEAT, white,	bushel.	1 40	1 45
Red,	"	1 38	1 40
WHISKEY, 1st pf. in bbls.	gallon.	37	38
" in hds.	"	37	dull
" wagon price,	"	33	33 1/2
WAGON FREIGHTS, to Pittsburgh,	100 lbs	1 12	—
To Wheeling,	"	1 25	—
WOOL, Prime & Saxon Fleeces,	pound.	62 to 75	26 to 28
Full Merino,	"	52	62 24 26
Three fourths Merino,	"	45	52 23 24
One half do.	"	40	45 23 24
Common & one fourth Meri.	"	35	40 22 24
Pulled,	"	38	40 23 26

FOR SALE,

A TWO years old three-fourths Devon BULL. He is of fine form and medium size—he has been fed as dry cattle usually are. Having no use for him, his price will be very low—only \$25.

June 9th.

SINCLAIR & MOORE.

BALTIMORE PROVISION MARKET.

	PER.	FROM	TO
APPLES,	barrel.	—	—
BACON, hams, new, Balt. cured,	pound.	11 1/2	—
Shoulders,	"	10	10 1/2
Middlings,	"	10	10 1/2
Assorted, country,	"	9 1/2	—
BUTTER, printed, in lbs. & half lbs.	"	20	31 1/2
Roll,	"	20	22
CIDER,	barrel.	—	—
CALVES, three to six weeks old,	each.	3 00	6 00
Cows, new milch,	"	17 00	30 00
Dry,	"	8 00	12 00
CORN MEAL, for family use,	100lbs.	2 00	2 10
CHOP RYE,	"	2 00	2 10
EGGS,	dozen.	—	12
FISH, Shad, No. 1, t'd 7 50; untr d	barrel.	7 25	—
Herrings, salted, No. 1,	"	firm	4 50
Mackerel, No. 2&3, none; No. 1,	"	do	7 25
Cod, salted,	cwt.	2 25	2 75
LAMBS, alive,	each.	—	—
Slaughtered,	quart'r	—	—
LARD,	pound.	9	10
ONIONS,	bushel.	—	100
POULTRY, Fowls,	dozen.	—	—
Ducks,	"	—	—
POTATOES, Irish,	bushel.	62 1/2	87 1/2
Sweet,	"	1 25	1 50
TURNIPS,	"	—	—
VEAL, fore quarters,	pound.	—	—
Hind do.	"	—	—

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	U. S. Bank,	BRANCH AT BALTIMORE,	OTHER BRANCHES,
MARYLAND.	Banks in Baltimore,	par	par
Hagerstown,	1/2 a	—	—
Frederick,	do	—	—
Westminster,	do	—	—
Farmers' Bank of Mary'd, do	do	—	—
Do. payable at Easton,	do	—	—
Salisbury,	uncertain	—	—
Cumberland,	1/2 a	—	—
Millington,	do	—	—
DISTRICT.	Washington,	1/2 a	—
Georgetown,	1/2 a	—	—
Alexandria,	1/2 a	—	—
PENNSYLVANIA.	Philadelphia,	1/2 a	—
Chambersburg,	1/2 a	—	—
Gettysburg,	do	—	—
Pittsburg,	1 1/2 a	—	—
York,	1/2 a	—	—
Other Pennsylvania Bks. 1 1/2 a	—	—	—
Delaware [under \$5],	3 a	—	—
Do. [over 5],	3 a	—	—
Michigan Banks,	5 a	—	—
Canadian do.	5 a	—	—
VIRGINIA.	Farmers Bank of Virginia,	1/2 a	—
Bank of Virginia,	do	—	—
Branch at Fredericksburg,	do	—	—
Petersburg,	do	—	—
Norfolk,	do	—	—
Winchester,	do	—	—
Lynchburg,	do	—	—
Danville,	do	—	—
Bank of the Valley,	do	—	—
Branch at Romney,	do	—	—
Do. Charlestown,	do	—	—
Do. Leesburg,	do	—	—
Wheeling Banks,	do	—	—
Ohio Banks, generally 3 a 1/2	—	—	—
New Jersey Banks gen. 1 1/2 a	—	—	—
New York City,	1/2 a	—	—
New York State,	2 1/2 a	—	—
Massachusetts,	2 a 1/2	—	—
Connecticut,	2 a 1/2	—	—
New Hampshire,	2 a 1/2	—	—
Maine,	2 a 1/2	—	—
Rhode Island,	2 a 1/2	—	—
North Carolina,	3 a	—	—
South Carolina,	2 1/2 a	—	—
Georgia,	4 1/2 a	—	—
New Orleans,	do	—	—

FOR SALE,

A FIRST RATE POINTER DOG. He is thorough bred, well broken quarters well and stands trimly. To save trouble, his price is \$50. Address W. L., at the Farmer and Gardener office. All applications from abroad must be post paid. Je 16

FLOWERS.—The citizens of Baltimore and others, are hereby informed that the Rose Plants at our Nurseries are now in full bloom; a very extensive assortment of almost every shade, from pure white to dark purple, or what is termed black, amongst them are the much and deservedly celebrated Greville Rose; one plant contains 70 clusters, on one of which we counted fifty rose buds, colors varying from white to dark purple.

In compliance with the request of our friends and customers, we give this notice, in order that those who are desirous of seeing the Roses and other plants and trees in our nursery, may have the opportunity to see and make selections of roses, &c., whilst in bloom, to which they are respectfully invited.

je 9

SINCLAIR & MOORE.

50 BUSHELS OF BUCKWHEAT, suitable for seed, just received and for sale. Apply to June 16th. SINCLAIR & MOORE.

DEVON COW AND CALF.

FOR sale, a first rate DEVON COW, five years old this spring, of the best blood and most beautiful form. She is altogether one of the most perfect animals of her kind, and is in Calf to a first rate Devon Bull. She has also by her side a BULL CALF, two months old, equal in all respects to any other calf of his kind, and age. The price of the two animals is \$200, and they will be delivered in Baltimore. Address

I. I. HITCHCOCK, Philadelphia.

June 9th, 1835.

FOR SALE,

A DURHAM BULL—Apply at this office. June 2

LUCERNE SEED.

FOR SALE ON PLEASING TERMS,

500 LBS. fine quality LUCERNE or FRENCH CLOVER SEED. This is one of the most valuable grasses which has as yet been introduced into cultivation in our country, and can be recommended as being particularly adapted to the purposes of soiling, as it is fit for the scythe the fully two weeks before the common Red Clover, and can be advantageously cut several times in the course of a season. Persons sowing this species of Clover, should also sow with it half a bushel of Rye, or some other grain to the acre, so as to protect it from weeds the first year, or until it attains its wonted strength and becomes sufficiently matted to smother the weeds. The quantity of seed sown to the acre is 18 lbs.

ALSO, SCARLET CLOVER, or Trifolium Incarnatum, a very early sort, possessing many advantages.

St. FOIN, and BURNET GRASS seed, both highly spoken of for culture in high, dry soils, as improvers of land—which, together with

RUTA BAGA TURNIP, WHITE FLAT, YELLOW BULLOCK, EARLY DUTCH, and many other sorts, all of the best varieties of Turnip Seeds, for field and garden culture, are confidently recommended as of the very first quality, being selected with great care, and due regard paid to their freshness.

R. SINCLAIR, Jr.

At Seed Store connected with this Office.

June 2.

THE Subscriber has just received by the ship Canada a splendid assortment of English and Dutch Garden and Field Seeds. The respectability of the gentleman by whom these seeds were raised warrants me in recommending them with perfect confidence. But to be certain of the quality and to prevent disappointment to purchasers, proof samples of each sort are taken and will be fully tested in hotbeds prepared for the purpose.

ROBERT SINCLAIR, Jr.

At Sinclair & Moore's Maryland Agricultural Repository, Light near Pratt street. March 3.

TERMS OF THIS PAPER.

1. Price five dollars per annum, payable in advance. When this is done, 50 cents worth of any kind of seeds on hand will be delivered or sent to the order of the subscriber with his receipt.

2. The manner of payment which is preferable to any other for distant subscribers, is by check or draft on some responsible party here, or else by remittance of a current bank note; and to obviate all objection to mail transmission, the conductors assume the risk.

3. Subscriptions are always charged BY THE YEAR, and never for a shorter term. When once sent to a subscriber the paper will not be discontinued (except at the discretion of the publishers) without a special order, on receipt of which, a discontinuance will be entered, to take effect AT THE END of the current year of subscription.

4. Subscribers may receive the work by mail either in weekly numbers, or in monthly or quarterly portions; or else in a volume (ending in May annually), handsomely pressed, half bound and lettered (to match with the American Farmer) by such conveyance as they may direct: but the \$5 must in all these cases be paid in advance.

ADVERTISEMENTS relating to any of the subjects of this paper will be inserted once at one dollar per square, or at that rate for more than a square, and at half that rate for each repetition.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 8.

BALTIMORE, MD. JUNE 23, 1835.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, JUNE 23, 1835.

We had a most excellent essay by Mr. Abednego Robinson, on the *Ribbon Grass*, in type, but were compelled to omit it, in order to make room for the interesting official account of the late EXHIBITION OF THE MARYLAND HORTICULTURAL SOCIETY, an institution which, though unobtrusive in its march, has, by its own intrinsic worth, found its way to public esteem, and is effecting in its own peculiar walks of beauty and of usefulness, a sum of good which defies calculation.

SHEEP HUSBANDRY.—We insert in the present sheet, a very interesting article on this subject. While we bespeak for it an attentive reading from our subscribers generally, we would particularly call the attention of our *Alleghany correspondent* to it, as it contains full answers to all the queries he propounded in our 5th number, on the subject of *sheep*; and we would here briefly observe to him, that his "mountain land" may most "advantageously" be occupied in the manner he proposes. By the way it has often been a matter of surprise to us that gentlemen owning estates in that interesting region of hill and dell, had not long since turned their attention to this branch of husbandry, combining, as it does, so much of the pleasant with the profitable, qualities of such decided attraction, and so well calculated to elicit the notice of those, who, from the simplicity of their hearts, romantic character of their minds, or from the desire of acquiring wealth, may have a *penchant* for the rural life.

We visited the extensive *Nursery* and highly cultivated farm of the senior proprietor of this establishment, last Wednesday, being attracted thither to see his *Rosa Grevellii*, which was then in bloom: and in despite of the peltings of the

rain of the previous day, it did, in truth, present an exquisitely beautiful and highly interesting sight. It is of China origin, and of the variety of the *Multiflora*, but excels it in every thing worthy of admiration as far as it is possible for one of the same family to exceed another. It covers an area of about ten feet by twelve. In richness of foliage, and luxuriance of growth, it is almost without a rival. The flowers were in large clusters, shooting forth from almost every eye of the wood of last year, varying in hue, tint and color, from the purest white, pink, and purple, to deep red. Nearly the entire surface was studded with these clusters, challenging by their indescribable brilliancy of appearance, beauty of form, diversified size and quality, silky-lace-work appearance, and neat arrangement, the undivided homage of every one who may have seen it, and has a heart to enjoy the most lovely of the whole tribe of roses. Before we saw it, it had been deprived of some of the largest of the clusters, and as we learnt, one of these had upwards of twenty distinct shades of colours on it—those which we saw were sufficient to convince us that as the rose is the queen of flowers, so is this the queen of Roses.

Under the head of *Gardening* we have placed the chapter on "*Herbaceous Grafting*," to which we referred in our last number. It will be found to be eminently useful to gardeners, orchardists, and agriculturists, and together with the chapter on "*Budding*," which we gave in our journal on Tuesday last, will prove highly interesting, as it contains the best information on the latest and most improved modes of multiplying trees and shrubs, by these means, in England and France.

EDITORS AND THEIR READERS.—The editor of the New York Farmer and American Gardener, in publishing a communication from one of his subscribers, has the following paragraph:

"He is a subscriber to the *Farmer*, and paid in advance, and has already procured one other subscriber, and will probably procure more."

Such evidences of the approbation of one's subscribers, are among the most gratifying occurrences in the life of an editor. They tend to make a highly laborious and irksome profession, one of

infinite pleasure and profound delight. Let one say what he may to the contrary; however indifferent he may *outwardly* appear to those manifestations of favor from individuals, and the public, which occasionally cheer him forward, in the discharge of his duty—we say, however indifferent he may *outwardly* appear, there is no editor who does not *inwardly* feel emotions of unmixed pride, and sincerely rejoice at being the recipient of them. For ourself, we hold it that a virtuous mind could desire no stronger incentive to high emprise and honorable exertion. It is the richest reward which can be *bestowed*, and is next in intrinsic value to that priceless jewel—a self-approving conscience—compared to which, gold is but as dross, and human praise "a tinkling symbol." It is, therefore, the consciousness of deserving the meed of praise awarded, which imparts to it appreciation; and hence it appears to us, that to a grateful heart no incident could excite more pleasurable emotions than where a patron, unsolicited, feels sufficient interest in the welfare of an editor to procure a subscriber to transmit to him, when he sends in his annual subscription. Besides the pecuniary benefit conferred—besides the aid furnished to his paper—the *act*, itself, is so disinterested—so gratifying a mark of kind feeling from an individual to whom, perhaps, personally, you are a stranger, that it steals over one's feelings in despite of every guard of stoic-prudence,—and we instinctively feel ourselves subdued by those outpourings of humanity, which, when harmoniously commingled, form at once the most beautiful indices of lofty aspiration, generous sentiment, and just and honorable principles. The mere circumstance of adding another subscriber to the *list*, in the abstract, is no great consideration; but the *manner of obtaining the subscriber*, is every thing;—the *motive* which prompted the obtainment, thrice hallows the deed, increases the obligation a thousand-fold, and does more to give moral force and power to the genius of an editor, if he have any, than a dozen procured through his own personal solicitation. We spoke of an editor being a stranger to his subscribers:—but in so speaking, we placed too much value upon the *worldly acceptance of the term*. An editor who is honest, upright, frank, and sincere, is not, and cannot be, a

stranger to his subscribers. What is it that make men acquainted with each other? A personal introduction? We deny it. The usual ceremony may be gone through with a dozen times—aye, a thousand times, and still the parties continue to be strangers—utter strangers, to each other. *Policy*,—or, if the phrase suit you better,—*delicacy*—restraining each from unfolding his true character to the other. Well then, what is it? Why what else than a knowledge, a thorough knowledge, of each other's genuine thoughts, feelings, principles, and views, can make men other than strangers to each other. And this may be acquired as well, if not better, through the medium of a paper, than by means of oral conversations. Does not the editor who is ingenuous, open, unreserved, and manly, hold daily conversations with his readers? What are his editorial columns, but so many communings with them? Does he not thus place a microscope before their visual organs, by which they can each look into the inmost recesses of his heart, inspect every minute atom therein, and thus develope, *ad libitum*, every secret hope, each earthly wish, and all his worldly designs—whether holy or unholy? Tell us not then, that an editor is a stranger to his readers—the assertion is at once an imputation upon his *honesty* and upon their *discernment*. If they, after having been his readers, still be strangers to him, he has been a dissembling, cozening, creature; they either the dupes of his knavery—or so dull and stupid, as not to be able to read,—even with the aid of the strongest magnifyer,—a thing most plain and palpable to the senses.

It is stated in the London edition of "*Letters on Entomology*," published by Whittaker, that the fly is made to contribute to the ripening of the fig in the Greek Islands, and other Eastern countries, where the harvest of that fruit is of great consequence to the people. They plant two kinds of figs, the wild and the cultivated sorts. The wild tree bears fruit many times in the year, and in them grubs are born that turn to flies; which are considered necessary to the ripening of the garden figs, they generally falling off before their maturity, if these insects do not pierce them at the proper time. In the months of June and July, the country people gather wild figs, string them on straw and sticks, and place them on the garden fig-trees. They take great care every evening to look for those wild figs that are ready for gathering—that is, when a fly is ready to come out, and also, to observe when the other trees are properly ripe; for if the transfer is not made at the right time, the garden figs will drop off. This custom

is evidently established by long experience, as the peasants anxiously watch all the rest of the year, whether the wild figs will be likely to produce flies in time, and the number of them determines the harvest of the fruit. Indeed so necessary are these insects, that if they fail, the people have but one resource, which is, to spread over the trees a common plant called the *Ascolombros*, the fruit of which contains flies fit for the purpose.

These facts present matter worthy of the most serious consideration of the vegetable physiologists. Is it the mere act of piercing it, which enables the bush to retain and mature its fruit? Or is there some specific liquid virtue inserted at the moment the puncture is made, which produces the desired effect? If the cause involved in the first interrogatory, be the true one, the same effect might be produced, we should think, by human agency; but if the latter question refers to it, then the difficulty of substituting another agent for the fly, would be greatly increased, as from the very subtlety of the fluid injected, be its constituents what they may, it would defy the skill of the most accomplished chemist to analyze or furnish a substitute for it. If then, this practice be not founded in those prejudices which tradition hands down from father to son, without either having any *rationale* to justify their belief in its efficacy, then, indeed, is the fly of more consequence to the operations of man, than most people are willing to give him credit for:—and well might my Uncle Toby open the window and let the one that annoyed him go free, there being room enough in this world for them both. But to return to the subject. What is the specific effect produced by the perforation of the fly? Does the puncture merely serve as a conduit to let off the superabundant juices of the fruit? or are we to infer that the fly injects some substance possessing the property, when mixed with the sap of the tree, of stimulating the twigs from which the figs are pendant, so as to give to them the tenacious power of sustaining the fruit until it ripens? If the flies do perform the service ascribed to them; if their action on the tree give to it the capacity imputed, they are truly most apt and skilful horticulturists, and it is to be regretted that their attention cannot be secured for the plum family, a race so sadly addicted to casting their fruit prematurely. But why should the fly select the *wild* in preference to the *garden* fig to deposit its eggs? These are questions which we should really like to see answered, and hope that some gentleman acquainted with the subject, may feel sufficient interest in their solution, to give the necessary explanations. The field is an ample one, and would repay the man

of genius, by the satisfaction he would derive from the reflection, if he should be successful, of having raised the veil which, for centuries, had concealed the mysterious operation of an insignificant insect, by which it effected for man what he could not do for himself.

MEASURING CORN—The following rule for ascertaining the quantity of shelled corn, in a house of any dimensions, is by Wm. M. Murray, esq. of South Carolina, and was read before the St. John's Colleton Agricultural Society, and communicated by them for publication in the Southern Agriculturist:

Rule. Having previously levelled the corn in the house, so that it will be of equal depth throughout, ascertain the length, breadth and depth of the bulk; multiply these dimensions together, and their products by 4; then cut off one figure from the right of this last product. This will give so many bushels and a decimal of a bushel of shelled corn. If it be required to find the quantity in ear corn, substitute 8 for 4, and cut off one figure as before.

Example. In a bulk of corn in the ear, measuring 12 feet long, 11 feet broad and 6 feet deep, there will be 316 bushels and 8 tenths of a bushel of shelled corn, or 633 bushels and 6 tenths of ear corn—as:

12	12
11	11
6	6
132	132
6	6
792	792
4	8
316.8	633.6

Mr. Murray demonstrates the correctness of his rule thus:

In a cubic or solid foot there are 1728 cubic inches. Suppose the solid content of a bulk of ear corn to be 792 cubic feet, as in the above example, it is plain, if we multiply this sum by 1,728, we reduce it to cubic inches; divide this product by 2,150, (rejecting the two-fifths as unimportant, and we evidently have the number of bushels of ear-corn in the bulk, *i. e.* about 636½ bushels, or about three bushels more than was obtained by the operation of the rule. But conceive 1728 and 2150 to constitute together a vulgar fraction thus, $\frac{1728}{2150}$ —in order to arrive at the true number of bushels, we have multiplied by the numerator 1728 and divided by the denominator 2150. Now the vulgar fraction $\frac{8}{11}$ is a very near approximation to the fraction $\frac{1728}{2150}$; therefore, to multiply by 8 and divide by 10 would produce very nearly the same result; this we have in effect done by multiplying by the decimal, 8. The decimal 4 is used when the object is to find the quantity in shelled corn, because that decimal is the half of the decimal 8, and it requires two bushels of ear corn to make one of shelled corn. In using those rules a half bushel should be added for every hundred, that amount of error resulting from the substitution of the decimals.

THE WHEAT AND ROOT CROPS.—We believe it is no longer a question, that the *wheat crop*, will prove a *short one*, and that from present appearances, in many districts heretofore distinguished for superiority in quality, and greatness of yield, not much more than the seed, can be expected to be returned; and that in others, all seem to think, as if by common consent, that if half a crop should be realized, it will be a source of profound thankfulness.

With such prospects ahead, we feel it our duty once more to remind our agricultural friends that it is *now time* they were turning their thoughts upon the subject of *root crops*, generally. *Potatoes, Carrots, Parsnips, Mangel Wurtzel and Beets*, require immediate attention. A few acres of these, placed in ground well manured and prepared, and well attended to, will secure comfort and plenty for both man and beast, during a long winter, and backward spring. And as the period for *turnips* is coming on apace, the judicious farmer will, of course, look around him, take time by the forelock, and put the ground he has allotted for that prolific root, into a proper state to receive and nurture it.—Nor should it be forgotten, that now is the time to set out *cabbage plants*. An acre with a plant on every 2 feet 6 inches, by 3 feet, would grow 5,808 cabbages, which would require but 3 hoeings from the time of transplanting, until they would be fit to be put away for winter. These at two cents a piece, would bring, in the gross, \$117.16 cts., if sold; and if fed out to the milch cows, through the winter, would greatly tend to increase the profits of the dairy, the comforts of the house, and the luxuries of the table. It is impossible to keep cows to their milk upon dry food; and every farmer should, therefore, provide roots of all kinds, pumpkins, and cabbages, to give them when they are cut off from the green vegetation of the clover fields and pastures. If the milk should be injuriously affected by any, or either of the vegetables named, a small piece of saltpetre thrown into the pan, when the milk is freshly strained, will correct the flavour.

THE WHEAT AND CORN CROP IN N. CAROLINA.

The *Norfolk Herald* says:—We learn that the wheat crop in the neighboring counties of *North Carolina* was never better in appearance than at present. In a few places, where the seed was sowed late, it came up thinly; but what grew is uncommonly luxuriant. The Indian Corn is coming on finely, and if the season continues favorable, the product will equal that of any past year."

This is truly pleasing news, and we are gratified to find that our North Carolina friends are in such good luck; for good luck it will prove to them, as both these staple articles will command good prices, if we are to judge from the almost universal out-cry of a short wheat crop in nearly every direction; and as an unfailing consequence, the shortness of the one crop of a necessary of life, must impart increased appreciation to the other.

THE SILK CULTURE AND THE SOUTH.

The editor of that ably conducted paper, the "*Alabama Register*," has put the following query; which we shall take the liberty of answering:

"Query. Would not the culture of silk succeed better in the southern states, than in any other part of the Union?"

Answer by the Editor of the Farmer & Gardener.

There can be no question but that the culture of silk would succeed better in the southern states than in any other part of the union. The winters being there more mild and less subject to sudden changes, render them peculiarly suited to the growth of the *Morus Multicaulis*, the new variety of the Chinese mulberry introduced into culture in the United States within the last few years. And as this tree must be chiefly relied upon for the food of the *worm*, the temperature of climate is an object of primary consideration to its successful culture. We believe, however, that it will succeed in any of the states, if proper regard be had to planting it in warm, high situations, where the trees can be protected from the north-west winds in winter. It withstood the last winter to the eastward, with various success: where the trees had the advantage of a few years age, and the bark had become somewhat hardened, they stood the frost as well as those that were native there; where the trees were yearlings, they suffered more or less, according to situation, and in some instances were killed to the ground; but came up vigorously from the roots this spring. In this vicinity, trees in high warm situations were in a good state of preservation in the spring, while others in less favored spots in low damp grounds, shared a similar fate with those to the eastward. In the neighborhood of *Brinkleyville, North Carolina*, they came through the winter without material injury, and evinced great tenacity of life. The *white mulberry*, the next in goodness for feeding the worm, will live any where.

In conclusion, we would remark that we believe, not only that the southern states are better adapted to its culture than any other, but that we are of opinion the introduction of it among

the old members of them would prove a blessing. There is a fact connected with the history of the growth of the mulberry, which cannot be too forcibly impressed upon the minds of the farmers and planters of Maryland, Virginia, North Carolina, South Carolina, and all others of the southern and middle states, where there may be a superabundance of worn-out lands—it is this, ~~that~~ **THAT MULBERRY GROWN IN POOR GROUND YIELDS THE BEST AND RICHEST SILK**—so that those barren wastes, which have been killed up by improvident culture, and exhausting crops, may yet prove so many God-sends to their proprietors.

THE FARMER.

FARMER'S WORK FOR JUNE.

[From the Farmer's Reporter.]

This is the month in which the farmer should look about, and see what nature is doing for him. If indications imply that the boughs of fruit trees are soon to be bent towards the ground with the weight of the growing fruit, he will look into his cellar, and see that none of his barrels and hogsheads become destroyed for want of a little attention. If the timely showers and genial warmth of the sun have made the meadows to wave with the green grass, then he will sharpen his scythes and engage in season the sturdy, the industrious, and the *temperate* arm to swing them. If the grain is of a healthy green, even, and free from the destroying insects, he will prepare his mows, his cradles, and make other preparations. It is not sufficient to manure and prepare the ground well, to sow carefully and to cultivate diligently, but the reaping must be done in season, and the crop well secured. Every preparation therefore should be made in time.

Hay-Making—The object in curing hay is to keep it from fermenting when in the stack or mow, and to preserve as much as possible, its sweetness and its juices. Some farmers disapprove of spreading the hay, but recommend it to remain to dry a little in the swarth, and then not to spread it, but simply to turn it over. Others advise to scatter it about immediately, and rake and get it into the barn before the leaves are so dry as to crumble. The latter, we think, is the correct way when the weather is very fine. Both of the above practices imply that the grass should not be left to become sunburnt, dry and hard. In case the hay is not perfectly as dry as it should be, mix with it, when mowed away, last year's hay or straw. Under all circumstances sprinkle from four to eight quarts of salt to a ton of hay. This is considered to increase its value at least one half, and even four times, say those who speak from experience. By the use of salt, hay may, as a general rule, not run half the risk of being injured.

Corn-fields should be cleansed and worked, so that, when hay making and the grain harvest comes on, the fields are not suffering from a neglected condition.

Corn—Some farmers disapprove of the use of the plough in tilling corn on the ordinary soil for

this crop, because it breaks and exposes its roots to the sun. They recommend as a substitute the cultivator, or, as some farmers call it, the plough-harrow, which does not ridge the ground. Cutting out the very feeble plants and thinning those hills that have too many shoots, are recommended by good farmers.

Caterpillars—These should be carefully watched, and destroyed on their first appearance, as well as later in the season. Some shoot them, others, with a long pole, having tow or rags around the end, wet with spirits of turpentine, swab them off.

[Remarks by the Editor of the Farmer and Gardener.—The practice of "shooting" is a ruinous one, as it is impossible thus to destroy the caterpillars without wounding the young and tender branches of the trees, leaving them to bleed, corrode and die. The prudent farmer, or orchardist, will always studiously avoid every thing calculated to lacerate his fruit trees, and especially in the growing season, when from the exudation of the sap the most serious injuries would ensue. The use of a mop saturated with spirits of turpentine, has been long known and favorably spoken of. We have used it with the best effects among our vines and shrubbery, and do not hesitate to recommend it. The oil of turpentine is sufficiently glutinous to cause the nests of caterpillars to adhere to the mop as it passes through them, and when brought to the ground the chrysalis and more mature worms, must be destroyed; that, after all, being the only effectual method of getting rid of them. The experience of every farmer's lady will be sufficient to convince her husband, that the portions of spirits of turpentine which attach to the limbs of the trees, in the operation of removing the caterpillar-nests, will be sufficient to make any of the insects which may remain change their quarters. There is something in the aroma of this essential oil, so offensive to the whole tribe of insects, which prey upon plants, that few if any of them have the hardihood to remain in its vicinity.]

THE GARDENER.

EXHIBITION OF THE HORTICULTURAL SOCIETY OF MARYLAND.

The Horticultural Society of Maryland held its third annual Exhibition on the 3d, 4th and 5th of June in the spacious Hall of the 'Baltimore Assembly Rooms.' Notwithstanding the unusual backwardness of the season, which had caused the postponement of the Exhibition to a time when many of our finest exotics had passed their bloom, the collection was very full, and what we had lost in some species, was made up in others that we could not have had at an earlier day.—The display of roses, particularly, was splendid beyond any former example in this city. Almost every variety of garden rose was in high perfection, and their number and quality, when collected and contrasted in the Hall, was most gratifying. The Pæonies, also made a fine display; though most of the varieties were out of bloom, we yet had the queen of the tribe, the splendid *Whitleji*, or large double white; and her two beautiful handmaids, the *Humei*—the splendid double pink—and the *Fragrans*, or double rose scented. These three are the finest of all the herbaceous kinds, though there are very many truly elegant ones. In one garden in this city there are *twenty-four* kinds. This splendid plant ought to be more generally introduced into private collections, as it is perfectly hardy, and requires neither care nor labor, after the roots are put into the ground.

Of the many splendid exotics that attracted particular attention, the *cactus speciosissimus* was decidedly the favorite. There were several large plants of it in fine bloom, and in high perfection. The peculiar lustre of the inside of the flower was uncommonly brilliant. The *Cactus Speciosus*, and *Cactus Jacksonii* also attracted

much attention; while the Society and visitors were gratified with the sight of one of the same family in bloom for the first time in this city—it was the *Cactus Ackermanii*, a very fine species with deep red flowers. The *Amaryllises*, particularly the *Johnsonienses* and the *Vittata*, made a fine show.

In the evening on the second day of the exhibition, the annual Address was delivered by Francis H. Davidge, Esq., and was pronounced in appropriate and eloquent specimen of oratory.

The exhibition was closed on the evening of the 3d day, by the distribution of premiums, a ceremony that seemed to excite considerable interest. The Society and visitors present were called to order by the President, B. I. Cohen, Esq., when the Secretary read the reports of the several committees appointed to award the premiums. After which, J. P. Kennedy, Esq., Vice President, presented to each successful competitor the premium awarded him.

The Committee of Arrangement are entitled to the thanks of the Society for the excellent "getting up" of the Exhibition. The various Plants, and cut Flowers were tastefully disposed, and arranged in the best manner to give due effect, so that, while no individual Plant or Flower was hidden or made to "blush unseen," the beauty of each and the whole collectively was heightened by combination and contrast.—To the Ladies who politely contributed their aid and advice in the arrangement, the Committee and Society were greatly indebted, and the present is adopted as the earliest and most appropriate mode of conveying to them the Society's thanks.

The following is a list of the most prominent objects and the names of the contributors.

VEGETABLES EXHIBITED.

- By Mr. James Stronick, gardener to J. B. Morris, Esq., 4 fine Cauliflowers and Kidney Potatoes.
By Mr. Edward Keen, two fine bunches of Asparagus.
By Mr. Gideon B. Smith, two fine bunches of Rhubarb.
By Mr. Peter Coombs, two fine Cauliflowers, and fine yellow Radishes.
By Mr. Richard Vallentine, a fine bunch of Rhubarb.
By Mr. Wilhelm, gardener to Mr. Ridgely, of Hampton, two fine Cauliflowers, Snap Beans, and Cucumbers.
By Mr. Thomas Dixon, one peck of peas and fine Spring Lettuce.
By Mr. Thomas Kehoe, gardener to Col. B. C. Howard, one peck of Peas, Cucumbers, Potatoes, and Cantaloupes.
By Mr. Laurence Aherne, gardener to W. H. Freeman, Esq., one dish of blue Potatoes; one dish of white do. very fine for the season.
By Mr. Edward Doran, two fine early York Cabbages and Lettuce.

FRUIT.

- By Mr. Samuel Feast, specimens of the Bourbon Strawberry, and the Scarlet Strawberry.
By Mr. Edward Keen, specimens of the Bourbon Strawberry.
By Mr. George Duncan, specimens of the Bourbon Strawberry.
By Mr. Peter Coombs, specimens of the Bourbon Strawberry.
By Mr. H. V. Somerville, specimens of the Bourbon Strawberry and Currants.
These were all very excellent fruit and made a fine display, each contributor presenting several boxes of them.
By Mr. D. W. Hudson, some fine Strawberries.
By Mr. James Stronecke do do
By Mr. Robert Sinclair, Sen. 7 fine varieties of Gooseberries.
By Mr. Vallentine, from the garden of the late Robert Oliver, some fine Gooseberries.
By Mr. Thomas Kehoe, from Col. B. C. Howard's garden, some very fine Gooseberries.
By Mrs. Tracy, fine Currants and Strawberries.
By Mrs. Beacham, 7 varieties of Gooseberries very fine.
By Mr. Zebulon Waters, a dish of the White Orleans Cherry.

The Gooseberries were of course not ripe, but were considered very fine, and indicated the increased attention that this excellent fruit is exciting amongst our gardeners.

ORNAMENTAL DEPARTMENT.

The following articles were exhibited—

- By Mr. James Carroll, large plants of the *Agave Americana*, and *Cactus Cochinelifera*, or *Cochineal Plant*, cut Flowers, &c.
From the collection of St. Mary's College, Bounapartia Juncea, Ficus Elastica, F. Nifca, F. Australis, Banksia Framosa, Sago Palm, Bubon Albanum, Date Palm, New Zealand Flux, Acacias, and many other fine plants.
By Mr. Robert A. Taylor, *Cactus Speciosissimus*, in fine bloom, and *C. Speciosus*, with many other fine plants.
By Mr. Evan Thomas, a splendid specimen of the Cedar of Goa, Sago Palm, Strelitzia Regina, *Cactus Speciosissimus* and *C. Jenkinsonia*, *Ardisia Coronata*, &c.
By Mr. Henry Schroeder, *Rhododendron Ponticum*, in full bloom, *Cactus Speciosus* in bloom, *Yucca Alofolia*, with other fine specimens, cut Flowers, &c.
By Mrs. Riggs, splendid bouquets of cut Flowers.
By Mrs. W. H. Freeman, 25 varieties of Garden Roses, cut Flowers, &c.
By Mr. Wm. T. Worthington, specimens of the *Gloria Mundi* and *Cabbage Roses*, which were very fine.
By Mr. Wm. Thomas, *Rhododendron Ponticum*, with other fine flowers.
By Gideon B. Smith, a fine collection of Roses, among them the *Herbemonti Grandiflora*, *Midas*, &c. and *Pæonies Whitleji*, *Fragrans*, &c.
By Mrs. Geo. H. Keel, *Verbena Malindris* and *Aubletia*, *Pittosporum*, *Tobira*, with a fine collection of cut Flowers.
By Mr. Thos. Kehoe, from Col. Howard's, *Carnations* with cut Flowers, &c.
By Mr. Thomas Dixon, from Mrs. J. Donnell's, fine cut Flowers.
By Mrs. J. B. Morris, some fine *Carnations*, cut Flowers, &c.
By Mrs. R. L. Colt, a fine Airplant, with others, and a fine Collection of cut Flowers.
By Miss Rachel Cohen, *Cactus Speciosissimus*, in full bloom, the flowers measuring upwards of six inches diameter.
By Mr. Edward Kurtz, *Banksia Framosa*, *Corea Pulchella* and *Viridiflora*, *Thea Bohea* and *Viridis*, *Cactus Speciosissimus* and *Speciosa*, *Amaryllis Regina*, *Azalea*, *Sinensis*, *A. Ledamfolia*, *A. Ponticum*, with a fine collection of *Geraniums*, consisting of *Lord Yarborough*, *Daniel Webster*, *Duke of Northumberland*, *Russellianum*, *Devere*, with many other varieties, cut Flowers, &c.
By Mr. Zebulon Waters, *Pelargoniums*, a fine collection, *Calceolarais*, *Eugenia Jambos*, *Cactus Speciosissimus*, several varieties of *Phlox*, and many other fine plants.
By Mrs. B. I. Cohen, *Erithrina Cristagale*, *Amaryllis Johnsoniensis*, *Eranthemum Pulchellum*, *Aloe Carina*, &c.
By Mr. James Wilkes, *Metrosideros Sempervirens*, *Laurustinus*, &c.
By Robert Sinclair, Sen. cut Flowers, comprising 30 varieties of *Roses*, &c.
By John Feast, *Cactus Speciosissimus*, *Mango Tree*, *A-tropogan*, *Paniculata*, *Musa Sapientum*, yellow *Noisette Rose*, *Amaryllis*, *Vittata*, *Sprengelia Incarnata*, *Calceolarias*, *Stirculia Platanifolia*, *Azalea Verticillata*, *Phormium tenax*, *Date Palm*, *Petunia*, a collection of *Pelargoniums*, including the rarest varieties, *Magnolia Fuscata*, *Clematis Florida*, *Justicia Nova*, &c.
By Mr. Samuel Feast, *Camphor Tree*, *Coffee Tree*, *Cinnamon Tree*, *Cactus Ackermanii*, (in flower for the first time here) *Cactus Speciosus*, with seventy five flowers, *Protea Argentea*, *Bohea* and green Tea Trees, *Ardisea Crenata* and *Solanicea*, *Amaryllis Johnsoniensis*, *Calceolarias*, *Sago Palm*, *Gardedia Thunburia*, *G. Florida*, *Ficus Australis*, *Melalucis*, *Metrosideros*, *Gricas*, fine *Pelargoniums*, *Burchillia Capensis*, *Horea Spatufata*, *Nurembergia*, *Crinum*, *Amabilis*, *C. Asiaticum*, *Draceana Fera*, *Clematis Florida*, *Mimulus Smithii*, with cut flowers, comprising above one hundred varieties of roses, &c.
The contributions of cut Flowers, were most liberal, comprising an immense variety, and in great profusion,—so much so that several large stands and an immense number of vases, &c. were occupied by them. It is more than probable that some of the names of the contributors may have escaped notice; if so, it is hoped that the omission will be attributed to the hurry and confusion incident to such occasions.
The Committee of arrangement and the society take this occasion to return their thanks to all the contribu-

tors, as well of cut flowers, as of plants, fruit and vegetables.

PREMIUMS

Awarded by the several committees of the Horticultural Society, at the third annual exhibition.

It should be observed that the articles for which these premiums were awarded are produced and exhibited during the year commencing the Saturday following the last day of the last annual exhibition, and consequently embrace many articles not exhibited at the present exhibition. And also that besides these premiums the Society has awarded a special premium for some meritorious articles every Saturday since about the 15th of April last.

PREMIUMS

IN THE VEGETABLE DEPARTMENT.

For the best Cauliflowers, to Thomas Kehoe,	
Gardener to Col. B. C. Howard,	\$5.00
do do Lettuce, to T. Kehoe, do do,	3.00
do do Rhubarb to Wm. Feast,	3.00
do do Beets, to Thomas French,	3.00
do do Onions, from seed, to Caleb Whittemore,	3.00
do do Cape Brocoli, to C. Whittemore,	3.00
do do Celery, to Edward Doran,	3.00
do do Egg Plants, to Robert Dore,	3.00
do do Tomatoes, to Thomas Dixon,	3.00
do do Lettuce, open ground, to George Duncan,	2.00
do do Early Potatoes, to Thos. Dixon,	3.00
do do Salsify, to Peter Coombs,	3.00
do do Asparagus, open ground, to Peter Nante,	2.00
do do Crookneck Squashes, to Peter Coombs,	3.00
do do Pickling Cucumbers, to Edward Keen,	2.00
do do Lima Beans, to Rich'd Vallentine,	2.00
do do Snap Beans, to Mr. Wilhelm, Gardener at Hampton,	2.00
do do Garden Peas, James Pitcher,	2.00
do do Early York Cabbages, a discretionary premium of	2.00

FRUIT DEPARTMENT.

For the best Peaches, one peck, the amateur premium, to George W. Miller,	\$20.00
do do Strawberries, (last season) to James Maidlow,	3.00
do do Raspberries, to Caleb Whittemore	2.00
do do Gooseberries, to Andrew Clarey,	4.00
do do Cherries, to John B. Bastian,	3.00
do do Pears, to James Stronecke,	5.00
do do Foreign Grapes, to Thos. Holmes,	5.00
do do Native Grapes, to R. Sinclair, sen.,	5.00
do do Plums, to Mrs. B. I. Cohen,	3.00
do do Early Apples, to Wesley Hancock,	3.00
do do Apricots, to Mrs. Leonard Frailey,	3.00
do do Figs, to Miss Eliza Schroeder,	2.00
do do Cantaloupes, to Henry Thompson,	3.00
do do Winter Cantaloupes,	3.00

And the following discretionary Premiums, viz:

For fine Oranges and Lemons, to Jas. Carroll, Jr.	5.00
For a fine seedling Peach, to Mrs. W. J. Alcock,	5.00

ORNAMENTAL DEPARTMENT.

For the best collection of Camellia Japonicas, to Edward Kurtz,	\$10.00
do do Seedling Camellia Japonicas, to Edward Kurtz,	6.00
do do Collection of Dahlias, to S. Feast,	5.00
do do Seedling Dahlias, to G. B. Smith,	5.00
do do Collection of Heaths, to S. Feast,	5.00
do do do Azaleas, to John Feast,	5.00
do do do Amaryllises, to Z. Waters,	3.00
do do do Auriculas, to S. Feast,	5.00
do do Seedling Pelargoniums, to J. Feast,	3.00
do do Collection of Tea Roses, to S. Feast,	3.00
do do do Crysanthemums, to Mrs. George H. Keerl,	2.00
do do do Carnations, to Capt. Thos. Holmes,	2.00
do do do Tulips, to Henry Moore,	2.00
do do do Hyacinths, Mrs. B. I. Cohen,	2.00
do do do Primula Polyanthus, to John Feast,	2.00

For the finest and rarest Exotic, to Saml. Feast, for his splendid new Rododendron Hybrida,

For the best collection of Succulents, to St. Mary's College,

For the best collection of Herbaceous Plants, to John Feast, 3.00
For the best managed Green House, to Mrs. Thos. L. Emory, 15.00

In conclusion, we would request the attention of the citizens of Baltimore and of the State at large to the Horticultural Society. If there be a Society whose real object is the public good, the Horticultural Society is that one; and it is not the less so because it ministers to the innocent and laudable pleasures, as well as necessities and comforts of life. The weary and famished traveler thinks none the less of his host for soothing and delighting the mind as well as satisfying the cravings of hunger. This Society above all others may also lay claim to the merit of universal benefit to all classes of society. There is no man so high nor widow nor orphan so low, but the benefits of the Society reach them with palpable effect; by increasing the supply and thereby diminishing the expense of many of the necessities and even luxuries of the table; by diffusing taste for, and thereby increasing the cultivation of, the great variety of Shrubby and Flowers, to the pleasures of which, however stoical he may be in every other respect, no individual was ever yet found entirely indifferent.

The object of the Horticultural Society is simply, by the bestowment of honors and rewards, to induce the introduction of new, useful and ornamental vegetables and plants; to increase their production and improve their quality; to encourage skill, industry, and careful management in the practical gardeners and orchardists; and finally, THEREBY to enhance the comforts and enjoyments of the whole community. That the exertions of the Society have not been entirely inefficient, even for the short space of time that has elapsed since the commencement of its operations, our markets and gardens, and even the tables of all our citizens, bear testimony; that it will increase in its effects as its means of operating increase must be evident to all. We appeal, then, with confidence to the Ladies particularly, to join us, and thus by contributing their aid and countenance, enable us to extend the influence of our Society. We already have a respectable list of members, but as all are benefitted by, all should contribute to, a Society like this.

GIDEON B. SMITH, Cor. Sec'y.

N. B. Ladies and Gentlemen desirous of becoming members of the Society, may leave their names with the Secretary, or any other member of the Society.

HERBACEOUS GRAFTING.

1. *Grafting upon fleshy or tuberculous roots*.—It not unfrequently happens that a tubercle of a georgina root is found without eyes; and, when this is the case, notwithstanding all the care of the cultivator, it may remain in the ground one or two years without budding, till at last it rots.—This imperfection is easily discovered if the neck of the tuber is looked at attentively, for it is always there that the buds are found. In this case, as soon as a georgina bud upon some other tuber has begun to germinate, it is picked out with the point of the grafting-knife, and is taken away with a small piece of the tubercle adhering to it. On the neck of the barren tubercle a small hole is made, in which the bud is inserted, but in such a manner as that the base of the bud shall be perfectly on a level with the surface of the tubercle; and it is cemented with grafting-wax. The tubercle is then planted in a pot, taking care not to cover the neck on which the graft is, and the pot is plunged in a hot-bed under glass. When the graft has taken properly, the plant is turned out into the open border.

2. *Herbaceous furrow-grafting for vertical shoots*. A bud with a triangular slice of bark and wood, when in a soft or herbaceous state, is cut out of the scion, and inserted in a corresponding groove made in the stock, a ligature is applied, and afterwards grafting-wax. This mode of grafting succeeds both with the young wood of trees and with herbaceous plants, whether perennial or an-

nual. M. Tschoudy gave the arbitrary name of *omnitiges* to those plants, all the shoots of which have an equal tendency upwards, and which, of course, are all equally suitable to graft upon.

3. *Herbaceous grafting for shoots with opposite leaves*.—In the middle of the stem, between two opposite eyes, an angular and longitudinal incision is made, traversing the stem from one side to the other. The graft is cut angularly at its top and bottom. The binding, &c., is then put on as usual. This mode of grafting is suitable for those species of trees, and annual or perennial plants, the buds of which are opposite on the stem, which happens most frequently on the central shoots of plants. M. Tschoudy gives the name of *multitiges* to those plants, the central shoots of which have a tendency to rise more vertically than the lateral ones, and which have consequently more vigor; it is upon these central shoots that the grafts ought to be made.

4. *Grafting on the Stem of Annual or Perennial Plants*.—The period chosen for this mode of grafting is that of the greatest vigor of the plant, that is, some days before its going in flower. The stem of the stock is cut through above a leaf, as near as possible to its petiole, and a slit downwards is made in the section. A shoot is then taken off near the root of the plant to be increased, the end of which is cut into a wedge shape, and is inserted in the slit made in the stock, taking great care of the leaf on the latter; for it is that which must nourish the scion until it has taken thoroughly, by keeping up the circulation of the sap. A bandage is applied, and the junction covered with grafting-wax, as before.—When the graft has taken, which is ascertained by its growth, the ligature is removed, and the old leaf, and the shoots from the stock below the graft, are removed. M. Tschoudy grafted in this manner artichokes upon cardoons, and other plants on their congeners.

5. *Grafting on Succulents*.—Take a young shoot or leaf of a succulent plant (for example, of a cactus or opuntia,) and, cutting its base to a point or wedge, insert it in a hole or slit made in the stem or leaf of another species, but of the same genus.

6. *Grafting the Melon*.—On the stem of a cucumber, or any other plant of the family of Cucurbitaceæ, but having some analogy with the melon, choose a vigorous part of a shoot having a well-developed leaf. In the axil of this leaf an oblique cut is made, of half its thickness. The point of a melon shoot, so far developed as to have its fruit quite formed, is then cut off, and pointed at its end, 2 inches below the fruit. It is inserted in the cleft made in the stock, always taking care to spare the leaf until the scion has taken. The remaining part of the operation is performed in the usual manner with ligatures, and grafting wax. This mode of grafting succeeds pretty well; but it has not hitherto been applied to any useful end. Tomatoes may be grafted in this manner on potatoes, and it is said that potatoe plants thus treated produce good crops both of potatoes and tomatoes.

Grafting-wax may be formed with turpentine, bees' wax, rosin, and a little tallow, melted together. It may either be put on in the same manner as grafting-clay, but not more than a quarter of an inch in thickness; or it may be very

thinly spread upon cotton cloth, and used in shreds like sticking-plaster. In this last state it serves both as a ligature for retaining the escutcheon or scion in its place, and as a covering for excluding the air. In very delicate budding and grafting, fine moss and cotton wool are frequently used as substitutes for grafting-clay or graft-wax; the moss or cotton being tied firmly on with thread or strands of bast-matting.

THE BREEDER & MANAGER.

[From the Maine Farmer.]

QUERIES AND ANSWERS IN RELATION TO SHEEP HUSBANDRY.

The five queries which are quoted below, came from an anonymous correspondent. They were forwarded to a gentleman pre-eminently distinguished as one of the best judges of stock, and withal an extensive breeder, who has promptly and very obligingly furnished us with the subjoined answers:

1. "Of what breed or stock had a beginner better compose his flock, his object being the growing of the wool?" Pure Merino, crossed with high bred South Downs.

2. "What are the prices at which the Saxony, South Down, Cotswold, Leicester, Bakewell, or Merino Ewes can be purchased respectively, after shearing?" From a good flock, you cannot select ewes, or it would not long remain a good flock; lambs or yearlings may be selected perhaps—price very various—depending on purity of blood, and individual excellence.

3. "What breed produces wool of the greatest value?" Saxony per pound—Merino per fleece. "And what breed yields the heaviest fleeces?" The great Lincoln, or Romney Marsh sheep.

4. "What breed is most hardy and best adapted to our climate?" South Downs, certainly.

5. "On what lands how many sheep per acre can be profitably kept?" That depends on the breed of sheep, and quality of land, but much fewer than are generally kept.

The Saxon sheep undoubtedly produce the finest wool; but their fleece is light, seldom exceeding $2\frac{1}{2}$ lb. in weight, and is too open to resist our storms. They are feeble in constitution; require great care, are poor nurses, and their lambs are raised with difficulty. The mutton from such sheep must necessarily be of a miserable description.

I believe that in Connecticut, even the pure Saxony sheep may be purchased at a comparatively low price, say from six dollars to four dollars a head, and perhaps lower still.

The old fashioned pure Merino sheep, which were imported by Col. Humphrey, and those associated with him, (but which are now almost extinct), were a much better constitution sheep, and more than made up by quantity for the difference in quality of their fleece—the close, thick texture of their wool resisted our cold, wet storms—their lambs were better nursed, and on the whole, I am convinced they are a much more profitable sheep than the Saxony. I must, however, remark, there are several varieties of the Spanish sheep; and I would carefully avoid the "gummy" family fleece, which however, must not be confounded with that, which though of a

dark color, contains only the grasses necessary to render it impenetrable to the weather; the former being very objectionable to the manufacturer, while the latter is readily cleansed and worked.

I desire to be understood as speaking of the pure breeds, and not of grade sheep, which so universally abound in this state, for they have no distinctive or fixed character, but vary with their degree of consanguinity to the pure imported blood. Indeed I feel well assured that there are very few individuals of the pure unmixed blood to be found.

The earlier Merino flocks of this state were obtained, from the introduction of imported bucks, and those were purchased at great prices, which with the native ewe, formed the ancestry of our fine woolled flocks; these had not attained nearly to the excellence of the pure Merino, in the staple of its wool, its compactness, its uniformity, or softness, when the Saxony cross was introduced, and became almost universal in a surprisingly short time—and this is the true history of almost all our fine grade sheep in this state. It is not, therefore, to these flocks that I allude when I speak of pure Merino, or Saxony sheep.

As to price, I presume such Merino sheep are more costly now than the Saxony; from the fact, that farmers are now aware of their error in using the Saxon cross, which has ruined the constitution of their flocks, decreased their clip of wool nearly one half, and reduced their produce, until with ordinary management, more than twenty-five lambs to an hundred ewes are seldom raised. A Merino buck of unquestionable purity, whose ancestry were both imported, will now sell for twenty-five and thirty dollars; the same animal, eighteen months since, might have been picked up at \$8 and \$10.

The Leicestershire, Bakewell, and Cotswold sheep are so crossed and mingled in this country, that the distinction is lost, except to the practised eye, who can find individuals in the various flocks which partake, as it may happen, more of the characteristics of the one parent or the other. These are long, coarse woolled sheep, possessing much beauty of form, early maturity, and are quick feeders; but they require rich lands for their pasture, and though their constitutions are good, yet their fleece is sufficiently open to admit the penetrating rains of our severe storms, and then it is that their heavy fleeces are seen separated along the ridge of the back, thus admitting the wet directly to the skin, until the animal is chilled through. They are good nurses, and make fine lambs; their meat originally coarse and long in the grain, and white in its color, was much improved by Mr. Bakewell, and under his management, became superior to the other large, long woolled sheep. Some of the best flocks of this variety may, I believe, be found in the sheep folds of Mr. Dunn, and Mr. Wilkinson, in Albany county, or of Mr. Alcock, Mr. Musson and Mr. Clark, in Ostego county, all of whom have given much attention to this fine variety of sheep. Average produce in wool, I should think, from five to six pounds, though individuals are found carrying fleeces of ten and twelve pounds. Price of good lambs, I believe, from ten to fifteen dollars.

The South Downs are as yet but little known in this country, but in my opinion, are decidedly

better calculated than any other, for the domestic purposes of our farmers. They are of a medium size, beautiful in their forms, large loined, broad chested, fine in the head, small boned, and fine in the fleece, which averages 4 lbs. in the ewes; the bucks reach to 7 lbs.; in quality it is equal to half blood Merino, but stronger in its filament, and entirely impenetrable to storms of snow, sleet or rain: they are regardless of our coldest weather, and possess heartier constitutions than any sheep I know. The wethers attain to about 28 lbs. per quarter, and are allowed to be the best mutton sheep in England; mild in flavor, and juicy. They are excellent nurses, and quick feeders. Here again, I beg to be understood as alluding to the pure and high bred South Downs; such as it is found in the sheep-folds of the great sheep masters in Sussex; and not the common, unimproved animal of the Downs, weighing 14 lbs. per quarter, and carrying but $2\frac{1}{2}$ of wool. As to prices, they are best ascertained from the sources of the respective breeds, and must vary much, according to the established purity of the blood, and the excellence of the individuals; the one a much more difficult point to ascertain than the other.

For the last three years, preparative to commencing my own flock, I paid much attention to the sheep husbandry of this district; visited those who owned large flocks, and soon discovered that they were all on the decline: I corresponded with others, and found the introduction of the Saxony blood was universally followed by a decline of constitution, and all its attendant evils; excepting in one instance, where a gentleman wrote me that he had just purchased a flock of Saxon Merinos. He assured me that in Oneida county, they were a hardy, healthy sheep—shearing on an average about 3 lbs. of wool, and the purer the Saxon blood, the heavier the fleece! This was so contrary to my own experience, having materially injured a flock of nearly two thousand grade Merinos by one single cross of the Saxony, that I still continued my plan of forming a flock from the pure, full bred, large Merino sheep on the one part, and from the high bred sheep of Mr. Ellman's flock of South Downs on the other. Assisted by the indefatigable perseverance, acute discrimination, and previous knowledge of a friend, (whose father was concerned with Col. Humphrey in his various importations and sales of such sheep), I collected, after 18 months search, about thirty full bred Merino sheep, pure as imported, known to be directly descended from these importations. Their quality of wool is as fine as perhaps any grade Saxony flocks of Mr. Ellman, in England, whose two year old wether sheep beat all England last Christmas, at Smithfield, and took the first prize. He was judged to weigh 32 lbs. per quarter; and I am happy to say, has been presented to me by Mr. Ellman, as a specimen of excellence, and will probably arrive in this country before long, as he was to be shipped from London the first week in this month, for New York. From Mr. Ellman I procured six yearling ewes, and a yearling buck; the ewes have wintered in a yard with an open fence and an open shed, closed only at the back; they lambed there from the 23d to the 28th of February, on which day the thermometer was as low as 4 deg. On the 1st, 2d, 3d, 4th and 5th of

March, the thermometer, in the shade, was from zero to as low as 6 deg. below zero, at sunrise; and yet my lambs, young as they were, never showed the slightest consciousness of its intensity; and are allowed by all who called to see them, to be the finest lambs they ever saw. I find a rapid demand for all I can spare from both my flocks, at liberal prices. The engagements for my South Down buck, for next season, have been filled for some months past; and two days since, Mr. Musson, a Leicestershire breeder, called to see him, when I took the opportunity of requesting he would weigh him—he very obligingly did so—and his exact weight was one hundred and fifty pounds and a half. I have ventured on these minutiae in regard to the *high bred* South Downs, as these sheep are very little known in the United States; and facts are more satisfactory than opinions:—And again I must insist that I do not allude to the *unimproved* breed; I do not allude to the South Downs of Cully's day, from whose writings I have seen various extracts descriptive of the breed—nor do I include the Hampshire Downs; I confine myself to the *high bred sheep* of the present day; and if any would oppose to them the fast rooted prejudice of high breeding being inseparable from delicacy, I would refer them to the facts above stated, and ask of them a personal inspection. I would further add, that Mr. Ellman's flock turns out more lambs than ewes; averaging 750 lambs annually, for several years, from 600 ewes.

A strong advocate myself for purity of blood, and a known line of ancestry, which confers excellence by descent, still I believe, for this country the most valuable description of sheep may be raised by judiciously crossing the Merino and South Downs, thus uniting the fine fleece of the one with the beautiful carcass of the other, and gaining at once a constitution suited to our climate. This was done some years since, on the introduction of the Merinos into England, and was attended by the most flattering success, the flock beating every other for the COMBINED excellence of wool and carcass. Both these breeds being fine, close wooled sheep, there is no extravagant dissimilarity, no wide contrasts to be amalgamated, and a more uniform character is easily obtained in the progeny, from which it will do to breed again. This is not the case with a cross between the long and short wooled varieties; the first cross will sometimes make a good animal, but when bred from again, the produce is uncertain, sometimes "taking back" on the long wooled parent, and sometimes on the opposite side; and when apparently combined in the fleece a united influence of the two breeds, a closer examination will shew an unevenness of length and filament that ill suits the manufacturer.

R.
Maple Grove, Otsego, March 25, 1835.

*The term "gummy" is in common use with farmers, and will be understood.

To preserve vines from bugs, &c.—Take 4 oz. tobacco, pour over it a gallon of boiling water, add 2 oz. pulverized sulphur, and 4 oz. glauher salts; when cool stir and sprinkle the plants with the solution; this is said to be an effectual preventive against destructive insects.

FOREIGN ABSTRACT.

London papers to the 15th, Liverpool of the 16th and Paris of the 13th May, have been received at New York. No additional news from France relative to the indemnity bill. Mr. Livingston and family arrived at Plymouth, England on the 10th May in the Constitution.

The Parliament of England resumed business on the 12th May; nothing important had been done. Lord Morpeth had been returned from the West riding of York, by a majority of 2,000 and Lord John Russell was a candidate for the Borough of Poole. The administration of Lord Melbourne is by no means strong, and doubts are seriously entertained of its standing. It is said to be without a single man of talent. Lord Denman's appointment as speaker of the House of Lords had given great offence to Lord Brougham, who is said to be perfectly savage at the neglect manifested towards him. There was considerable derangement in the money market.

The Carlists in Spain had gained advantages over the queen's troops, and it is said that succor under the treaty of last year will be claimed of the Portuguese government.

Changes in the ministry of Portugal have taken place; the duke of Palmella is succeeded by M. Friere, a man of energy and talents. It is reported, though not believed, that Don Miguel is dead.

Liverpool, May 16. Cottons—Uplands 10½ to 11d. Orleans 10½ to 11½d. Tennessee 10½d to 10½d. Mobile 11d to 11½d per lb.

London, May 12. Tobacco—sales 200 hhds. Kentucky 3½d to 4½d—the stock on hand only 600 hhds., none fine.

Santa Anna has been declared dictator of Mexico.

After our foreign Abstract and Domestic Summary were in type, we received the following:

Later from France.—The ship Garonne, at New York, brings Paris papers to the 13th and Havre to the 14th May, both inclusive. No additional news relative to the indemnity bill. On the 23d April Louis Phillippe issued an ordinance, exempting American vessels coming with clean bills of health from quarantine—the cotton on board of those which arrived in a French port from an American with foul bills of health is not in future to be opened or sent to the Lazaretto.

Sales at Havre, May 13th.—12 bales Mobile cotton (only) 145 a 150; 7 mill. N.Y. wax 180f.

DOMESTIC SUMMARY.

The Charleston papers state that peaches fully ripened in the open air have been in that city.

The actual subscription to the Bank of Charleston, S. C. amounts to \$89,449,440, of which \$81,093,800 were subscribed in Charleston alone.

The venerable and venerated Chief Justice Marshall is at present in Philadelphia, and we regret to learn by the papers of that city, that he is very unwell at his lodgings.

A most destructive fire took place at Charleston, South Carolina, on the morning of the 6th inst., commencing about half past 12, A. M. The Charleston Courier of the 6th, has an account, which though not full, shows that it was the

most calamitous fire which has ever ravaged and desolated that city; and the loss will be the more severely felt, as a large portion of the property was held by those who are but ill able to bear it. It is supposed to have been the work of incendiaries, as no light was permitted upon the premises where the fire originated.

As the sufferers are numerous, many of them reduced to want from easy circumstances, we do sincerely hope that their fellow-citizens, throughout the Union, will come to their rescue with promptitude. If there be any thing which appeals to the generous feelings of our nature with greater force and more resistless eloquence than another, it is where a large body of virtuous and industrious fellow mortals, are suddenly visited with calamity and stript of their means of support.

The corporation of Charleston have voted a thousand dollars towards the sufferers by the late afflictive fire in that city—a good example which we trust will be extensively followed.

Rail road stocks have become decided favorites with capitalists on the Atlantic seaboard; the old, so long depressed, is rapidly rising to and above par, and the new stocks recently thrown into the market, are taken with an avidity which indicates that there is a plenty of money, and abundant confidence in the several markets.

The Boston Fusiliers returned among us from their excursion to Washington, on Tuesday afternoon, remained with us until Friday morning, when they took their departure for their home, the cradle of liberty. While here, they were treated with that generous hospitality due alike to the gentlemanly deportment of the members of that ancient corps, and to our own good name.

An awful and destructive tornado passed over a part of N. Jersey, on Saturday last, causing great destruction to property and the loss of several lives. It commenced at Middle Bush, about 4 miles from New Brunswick, where it did much damage—thence to Piscataway, a neat village situated on the Raritan, three and a half miles from New Brunswick, consisting of 20 dwellings, all of which with the exception of three were destroyed. It then entered New Brunswick, where its work was destructive indeed. One account says 50 dwelling houses are destroyed and a vast number much injured. Another account, a private letter, says that 200 houses and barns, including a Methodist Church, built of brick, were destroyed and injured. Children are said to have been carried 100 feet in the air, and one a quarter of a mile, who escaped without any other injury than a sprained wrist. The names of the persons killed are the widow Van Arsdale, Henry Boerum, Esq., an officer of the Navy, and a son of Dr. Bayard. About 50 persons were wounded.

CONTENTS OF THIS NUMBER.

Notice of Ribbon Grass—do. of Sheep Husbandry—do. of Sinclair's *Rosa Grevelii*—do. of an article on Herbaceous Grafting—Editors and their readers—Mode of maturing Figs in the Greek Islands—Mode of measuring Corn—Wheat and root crops—Wheat and corn crop in N. Carolina—the Silk Culture and the South—Farmers' work for June, with remarks by the editor—Official account of the proceedings of the Horticultural Society of Maryland—Herbaceous Grafting—Sheep Husbandry—Recipe to preserve vines—Foreign Abstract—Domestic Summary—Prices Current, &c.—Bank note table—Advertisements.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,.....	bushel.	2 50	—
CATTLE, on the hoof,.....	100lbs.	7 00	—
Slaughtered,.....	"	—	—
CORN, yellow,.....	bushel.	90	95
White,.....	"	95	98
COTTON, Virginia,.....	pound.	17½	18
North Carolina,.....	"	—	—
Upland,.....	"	18½	20
FEATHERS,.....	pound.	37	40
FLAXSEED,.....	bushel.	1 37½	1 50
FLOUR&MEAL—Best wh. wh't fam.	barrel.	8 00	8 50
Do. do. baker's,.....	"	7 50	8 00
Do. do. Superfine,.....	"	7 00	7 25
Super Howard street,.....	"	7 00	7 25
" wagon price,.....	"	6 50	—
City Mills, extra,.....	"	—	—
Do.	"	7 00	—
Susquehannah,.....	"	7 00	—
Rye,.....	"	5 60	5 25
Kiln-dried Meal, in hhd.	hhd.	20 00	—
do. in bbls.	bbl.	4 37	4 50
GRASS SEEDS, red Clover,.....	bushel.	5 00	5 25
Timothy (herds of the north) ..	"	2 50	3 00
Orchard,.....	"	none	—
Tall meadow Oat,.....	"	2 00	2 50
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.	18 00	20 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	8
Hogs, on the hoof,.....	100lb.	—	—
Slaughtered,.....	"	—	—
HOPS—first sort,.....	pound.	12	—
second,.....	"	10	—
refuse,.....	"	8	—
LIME,.....	bushel.	33	35
MUSTARD SEED, Domestic,.....	"	5 00	6 00
OATS,.....	"	53	55
PEAS, red eye,.....	bushel.	—	—
Black eye,.....	"	—	1 25
Lady,.....	"	—	—
PLASTER PARIS, in the stone,.....	ton.	—	3 12
Ground,.....	barrel.	1 37	—
PALMA CHRISTA BEAN,.....	bushel.	2 00	—
RAGS,.....	pound.	3	4
RYE,.....	bushel.	95	97
Susquehannah,.....	"	95	1 00
TOBACCO, crop, common,.....	100 lbs	4 00	5 00
" brown and red,.....	"	5 00	7 00
" fine red,.....	"	7 00	9 00
" wrappery, suitable	"	—	—
for segars,.....	"	6 00	12 00
" yellow and red,...	"	8 00	12 00
" yellow,.....	"	9 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality,...	"	4 00	5 00
" ground leaf,...	"	5 00	9 00
Virginia,.....	"	5 00	10 00
Rappahannock,.....	"	—	—
Kentucky,.....	"	6 00	9 00
WHEAT, white,.....	bushel.	1 50	1 53
Red,.....	"	1 45	1 47
WHISKEY, 1st pf. in bbls.	gallon.	37	38
" in hhd.	"	37	dull
" wagon price,.....	"	33	33½
WAGON FREIGHTS, to Pittsburgh,...	100 lbs	1 12	—
To Wheeling,.....	"	1 25	—
Wool, Prime & Saxon Fleeces,...	pound.	62 to 75	26 to 28
Full Merino,.....	"	52	62 24 26
Three fourths Merino,.....	"	45	52 23 24
One half do.	"	40	45 23 24
Common & one fourth Meri.	"	35	40 22 24
Pulled,.....	"	38	40 23 26

FOR SALE,

A TWO years old three-fourths Devon BULL. He is of fine form and medium size—he has been fed as dry cattle usually are. Having no use for him, his price will be very low—only \$25.
June 9th. SINCLAIR & MOORE.

BALTIMORE PROVISION MARKET.

	PER.	FROM	TO
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured....	pound.	11½	—
Shoulders,.... do.	"	10	10½
Middlings,.... do.	"	10	10½
Assorted, country,.....	"	9½	—
BUTTER, printed, in lbs. & half lbs.	"	18½	25
Roll,.....	"	—	—
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old....	each.	3 00	6 00
Cows, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	2 00	2 10
CHOP RYE,.....	"	2 00	2 10
EGGS,.....	dozen.	—	—
FISH, Shad, No. 1, t'd 7 75; untr'd	barrel.	7 25	—
Herrings, salted, No. 1,.....	"	firm	4 50
Mackerel, No. 2&3, none; No. 1, ..	"	do	7 00
Cod, salted,.....	cwt.	2 25	2 75
LAMBS, alive,.....	each.	—	—
Slaughtered,.....	quart'r	—	—
LARD,.....	pound.	10	10½
ONIONS,.....	bushel.	—	—
POULTRY, Fowls,.....	dozen.	—	—
Ducks,.....	"	—	—
POTATOES, Irish,.....	bushel.	62½	87½
Sweet,.....	"	—	—
TURNIPS,.....	"	—	—
VEAL, fore quarters,.....	pound.	—	—
Hind do.	"	—	—

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	VIRGINIA.
U. S. Bank,..... par	Farmers Bank of Virginia,..... 2a
Branch at Baltimore,..... do	Bank of Virginia,..... do
Other Branches,..... do	Branch at Fredericksburg do
	MARYLAND.
Banks in Baltimore,..... par	Petersburg,..... do
Hagerstown,..... 1a	Norfolk,..... do
Frederick,..... do	Winchester,..... do
Westminster,..... do	Lynchburg,..... do
Farmers' Bank of Mary'd, do	Danville,..... do
Do. payable at Easton,..... do	Bank of the Valley,..... do
Salisbury,..... 5 per ct. dis.	Branch at Romney,..... do
Cumberland,..... 2a	Do. Charlestown,..... do
Millington,..... do	Do. Leesburg,..... do
	DISTRICT.
Washington,.....	Wheeling Banks,..... do
Georgetown,..... Banks, 1.	Ohio Banks, generally 3a3½
Alexandria,.....	New Jersey Banks gen. 1½a2
	PENNSYLVANIA.
Philadelphia,..... 1a	New York City,..... 4a
Chambersburg,..... 2a	New York State,..... 2½a3
Gettysburg,..... do	Massachusetts,..... 2a2½
Pittsburg,..... 1½a2	Connecticut,..... 2a2½
York,..... 1a	New Hampshire,..... 2a2½
Other Pennsylvania Bks. 1½a2	Maine,..... 2a2½
Delaware [under \$5]... 3a4	Rhode Island,..... 2a2½
Do. [over \$5]... 2a1	North Carolina,..... 3a4
Michigan Banks,..... 5a	South Carolina,..... 2½a3
Canadian do. 5a	Georgia,..... 4½a5
	New Orleans,..... do

ADVERTISEMENTS

FOR SALE,

A FIRST RATE POINTER DOG. He is thorough bred, well broken quarters well and stands firmly. To save trouble, his price is \$50. Address W. L., at the Farmer and Gardener office. All applications from abroad must be post paid.
Je 16

A BAKEWELL BUCK.

WANTED for an extensive agriculturist in the north, a Buck of the Bakewell breed of Sheep, to supply the place of one which has recently died. He must be a first rate animal, of the purest blood, and of fine points. For such an one, a liberal price will be paid. Application to be made to the editor of this paper.
je 2

FOR SALE,

A BROOD MARE about 15 hands high, color black, fine form and action. Apply at this office,
ay 26

50 BUSHELS OF BUCKWHEAT, suitable for seed, just received and for sale. Apply to
June 16th. SINCLAIR & MOORE.

DEVON COW AND CALF.

FOR sale, a first rate DEVON COW, five years old this spring, of the best blood and most beautiful form. She is altogether one of the most perfect animals of her kind, and is in Calf to a first rate Devon Bull. She has also by her side a BULL CALF, two months old, equal in all respects to any other calf of his kind, and age. The price of the two animals is \$200, and they will be delivered in Baltimore. Address
I. I. HITCHCOCK, Philadelphia.
June 9th, 1835. 3t.

FOR SALE,

A DURHAM BULL—Apply at this office.
June 2

LUCERNE SEED.

FOR SALE ON PLEASING TERMS,
500 LBS. fine quality LUCERNE or FRENCH CLOVER SEED. This is one of the most valuable grasses which has as yet been introduced into cultivation in our country, and can be recommended as being particularly adapted to the purposes of soiling, as it is fit for the scythe fully two weeks before the common Red Clover, and can be advantageously cut several times in the course of a season. Persons sowing this species of Clover, should also sow with it half a bushel of Rye, or some other grain to the acre, so as to protect it from weeds the first year, or until it attains its wonted strength and becomes sufficiently matted to smother the weeds. The quantity of seed sown to the acre is 18lbs.

ALSO, SCARLET CLOVER, or Trifolium incarnatum, a very early sort, possessing many advantages.

St. FOIN, and BURNET GRASS seed, both highly spoken of for culture in high, dry soils, as improvers of land—which, together with

RUTA BAGA TURNIP, WHITE FLAT, YEL-LOW BULLOCK, EARLY DUTCH, and many other sorts, all of the best varieties of Turnip Seeds, for field and garden culture, are confidently recommended as of the very first quality, being selected with great care, and due regard paid to their freshness.

R. SINCLAIR, Jr.

At Seed Store connected with this Office.

June 2.

THE Subscriber has just received by the ship Canada a splendid assortment of English and Dutch Garden and Field Seeds. The respectability of the gentleman by whom these seeds were raised warrants me in recommending them with perfect confidence. But to be certain of the quality and to prevent disappointment to purchasers, proofsamples of each sort are taken and will be fully tested in hotbeds prepared for the purpose.

ROBERT SINCLAIR, Jr.

At Sinclair & Moore's Maryland Agricultural Repository, Light near Pratt street.
March 3.

TERMS OF THIS PAPER.

1. Price five dollars per annum, payable in advance. When this is done, 50 cents worth of any kind of seeds on hand will be delivered or sent to the order of the subscriber with his receipt.
 2. The manner of payment which is preferable to any other for distant subscribers, is by check or draft on some responsible party here, or else by remittance of a current bank note; and to obviate all objection to mail transmission, the conductors assume the risk.
 3. Subscriptions are always charged BY THE YEAR, and never for a shorter term. When once sent to a subscriber the paper will not be discontinued (except at the discretion of the publishers) without a special order, on receipt of which, a discontinuance will be entered, to take effect AT THE END of the current year of subscription.
 4. Subscribers may receive the work by mail either in weekly numbers, or in monthly or quarterly portions; or else in a volume (ending in May annually), handsomely pressed, half bound and lettered (to match with the American Farmer) by such conveyance as they may direct: but the \$5 must in all these cases be paid in advance.
- ADVERTISEMENTS relating to any of the subjects of this paper will be inserted once at one dollar per square, or at that rate for more than a square, and at half that rate for each repetition.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 9.

BALTIMORE, MD. JUNE 30, 1835.

Vol. II

THIS publication is the *successor* of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, JUNE 30, 1835.

SOILING, GRAZING, AND GRASSES—A highly esteemed subscriber, of Virginia, having made inquiries of us concerning the relative profitability of soiling and grazing, and the grasses best suited to the latter, we addressed to several gentlemen of our vicinity, distinguished for their practical knowledge, scientific acquirements, and acknowledged skill, as agriculturists, queries requesting information upon the subject of the several questions respectively submitted to us. The answer of one of these gentlemen will be found in another part of to-day's impression. The nature and character of the queries put to him are inferable from his several answers, which latter are, as we expected they would be, clear, perspicuous, and highly satisfactory, and we will add, that, there is no gentleman in our country, whose opinion is entitled to greater consideration than is his, upon any subject connected with the pursuits of husbandry.

We publish the third Essay of our respected correspondent, *Ahednego Robinson*, Esq., on *Grasses*, in the present number of our paper. It gives an account of the *Ribbon grass*, a new species now about being introduced into culture to the eastward, and which promises to prove of great importance. Its thriftiness of growth in marshy and boggy soils, its property of rendering such situations sufficiently firm for a wagon and oxen to pass over them, together with its fruitful yield, must render it an object of vital moment with the southern farmers and planters, who have so much bog and marsh, which are now of comparatively little value, and which through the culture of this welcome *stranger*, may be converted into sources of profit. We hope that our old friend Robinson, will in due season send us by some of the vessels trading from Portsmouth to this place, a box of the roots. Should he do so, we will take especial pleasure in making such a

disposition of them as will most conduce to the public good. Should this grass on trial prove to be adapted to the southern climate, we hold it that, for the pains Mr. Robinson has taken to test its capacity for culture, he should receive a medal as a testimonial of the kind feeling with which the benefit conferred on the south shall have been received there. Those who know the liberal sentiments and native generosity which pervade in that quarter, will not doubt the practicability of such a project meeting with favor: but it will be time enough to think of this, when the marshes and bogs of the south shall have received into their bosoms this thrifty, though selfish exotic, which, it appears, plays the part of a cruel step-mother, by clearing out the house, in order that her own brood may have a fairer field to vegetate and grow in.

We have given in another part of the present number, an abstract of a law passed at the late session of the legislature of the state of Indiana, providing for the organization of *Agricultural Societies* in the several counties of that state, as also for a *General State Society*, each to be endowed with chartered privileges. The law is an important one, and we have, therefore, made a very full abstract of its provisions, and commend it to our readers as being worthy of an attentive perusal.

We are gratified to find that the planters and farmers of Tennessee and Virginia, as well as those of some other states, have also awakened to a sense of the importance of this subject, and are advocating associations throughout their several states. The benefit of such institutions to the agricultural communities in which they may be located, is almost too manifest to need remark; for their influence is apparent to all, in the meliorated condition of agriculture, in the improvement of the several species of domestic animals, and above all, in that laudable spirit of generous emulation among neighbors, which while it inspires them with a just ambition to excel in the cultivation of their several farms, binds them still closer together by the ties of friendship and personal respect.

In Massachusetts and Connecticut the legislatures have respectively granted bounties to encourage the silk culture—in Pennsylvania, Indiana, and several of the other states, enactments exist encouraging the formation of agricultural soci-

eties, and it is gratifying to see in almost every direction of our wide spread country, movements making to establish such associations where there are none now, and to infuse new life and vigor into those which are already in existence. This is as it should be: and we hope to see the good spirit go forward until there is a well organized society in every county in the United States.

BURNET GRASS—As there seems to be a disposition to enter into the cultivation of this grass, a few passing remarks may not be unacceptable, as to its general character. It is a hardy grass, will stand the frost and severity of the winter better than any other, and like rye-grass, makes an early pasture, it being of a quick growth. It will grow on any soil, but a loam suits it best. The land intended for it, should be brought into a fine tilth; from 16 to 20 lbs. of seed is sufficient for an acre. The seed must be covered with a very light harrow, and the ground rolled. It can be sown any time from April till September. If sown in the spring, it may be cut the first year once, but not oftener. The time for mowing, if it is not intended to save the seed, is, when in full bloom.

The seed will be ripe about the middle of June, (after the first year,) when it must be reaped like wheat or rye, and thrashed on a cloth, before it is too dry, because it is apt to shed; it should be afterwards dried perfectly. It does not lose in leaves in drying, and though the hay made from it be sticky, after being thrashed it is very agreeable to the horses, which are fond of it, and eat it with so much avidity as never to waste any. The seed is very nutritious, and horses fatten very rapidly on it. Three tons of hay and 40 bushels of seed, according to Spurrier, have been obtained from a single acre.

RYE GRASS—This grass when young, in the spring, is excellent for fattening horses, or other beasts, and when the cows are fed upon it, it greatly increases the quantity and quality of the butter and milk. It is particularly serviceable for feeding ewes and lambs in the early part of the season before clover and other grasses are ready, it being fully two weeks earlier. It is a hardy grass, so tenacious of life that it will grow on almost any land, whether clay or any other sour,

uncultivated soil, and requires but little attention. It will last several years. Two bushels of seed to the acre, if sowed alone: to be sown in the fall. It may, however, be sown upon grain in the spring with clover seed—in which case, one bushel of rye-grass seed, to from six to eight quarts of clover seed, is the proportion to the acre. It greatly increases the bulk of hay, and is a great addition to the clover, depriving it of the pernicious effects which it sometimes exercises when cattle are fed alone with it.

PROTECTION OF FIGS FROM FROST—A correspondent in North Carolina inquired of us a few weeks since how to protect his figs from the effects of the winter's frost. The Germans practice a method which we think would prove available in this country. Their method is, in the fall of the year to untie the fig-trees from the espalier, and lay them down, covering them from the frost with straw or litter, which prevents their shoots from being injured by the frost. This covering is taken away gradually in the spring, and not wholly removed until all the danger of the frost is over; by which management they generally have a very great crop of figs.

There is another inconvenience to be guarded against: owing to some seasons being cold and moist, the young shoots of the fig-tree will not harden, but are soft and full of juice; when such is the case, the first frost in the fall, if precaution be not taken to prevent it, will kill the upper part of these shoots for a considerable length downwards. By proper care, however, this may be prevented.

WHEAT CROP—PEACHES, &c.

We gave some few weeks since the substance of a conversation we had with the editor of the "Ohio Farmer," on the subject of the prospects of a wheat crop in his own state, in Western Pennsylvania, and east of the Alleghanies. On his return home from Baltimore he went by the way of Harrisburgh and Pittsburgh, and we are pleased to hear him speak thus encouragingly, in his paper of the 15th instant, of the appearance of the wheat crops in that part of Eastern Pennsylvania through which he passed:

"Through the whole of what is termed Eastern Pennsylvania, the wheat crops presented a very favorable appearance, surpassing any thing we had seen either in Ohio, Western Pennsylvania, or the west parts of Maryland. It presented no appearance of having been injured by the winter, and the ground was remarkably even and well covered."

After giving the above spice of good news, he adds the following of a very different character:

"In no other part of the country through which we have passed, either before or since, did this crop, the most important to a country, present the appearance of having escaped the severity of the winter."

"In Ohio, in addition to the unfavorable winter, and the ravages of the fly, in many places, the rains for the last six weeks have been, especially west and south of this place, nearly incessant. Harvest is almost upon us, and if the rains should continue much longer, (though from the signs of the last two or three days we have hopes this may not be the case,) the sad reality of a failure in our bread crops, will be added to the long gloomy prospect."

The Village Record, of the 24th June, published in West Chester, Pennsylvania, on the subject of the grain crops, states that:—

The present week our farmers will be pretty generally engaged in Haymaking. Some had their grass in the swarth so early as last week.—We wish them abundant crops—and fair weather for their harvesting. From present appearances the labors of our agriculturalists will be crowned with golden success. The farmer is the truly independent man—he enjoys pure air by day, and sweet sleep by night."

And in the same paper we see it stated, that the *wool crop* of Washington County in that state, at the average price of 55 cents a pound, will amount to \$360,000.

The *Genius of Liberty*, published in Leesburg, Loudon County, Virginia, has the following:—

The Harvest.—The time is near at hand when our farmers are wont to cut their harvest.—Sad and gloomy is the prospect, not only in this county, but, as far as we have heard, with very few exceptions throughout this wide and diversified country. There are some farmers in Loudon, who, owing to the localities of their farms, will make nearly an average crop—but they are few.—By far the greater part will not reap more than their seed, with perhaps a sufficiency for domestic use and enough to defray the expenses of harvesting.—Others will not make their seed. This is certainly very discouraging, and must have a tendency to enhance the price of wheat and flour, very considerably.

The Lynchburgh Virginian says, although it is certain, that in some sections of the country, the wheat crop will be very deficient, we should not be surprised, if upon the whole, it should turn out to be at least an average one.

The *peaches* in the neighborhood of Baltimore, were nearly all destroyed by the cold of last winter, *in the bud*. We conversed a day or two since with Mr. George W. Miller, who owns an extensive farm about seven miles down the river, and has an orchard of about 700 choice fruit trees in bearing. This orchard last season yielded him between \$1,800 and \$2,000 worth of peaches—the crop was about 2-3 of a

full one. His trees this year, will not yield, on an average, more than ten or twelve peaches, many of them none at all; some few have from 50 to 100 on them. We were, however, gratified to learn from him, that but few of his bearing trees were, *themselves*, killed. In a younger orchard of about the same number of trees, not yet yielding, he was not so fortunate; many of the younger trees being killed to the ground.

The extensive peach orchard of Mr. Richard Cromwell, situated also in our vicinity, so celebrated for its delicious fruit and immense yield, we regret to learn, has also shared a fate similar to that of Mr. Miller.

THE FARMER.

GRAZING AND SOILING—GRASSES.

Messrs. Sinclair & Moore—

Gentlemen—I have to acknowledge the receipt of your too flattering, but much respected letter of 16th inst., and although I consider your senior partner more capable of answering the queries propounded than myself, yet as you have requested my opinion thereon, I cheerfully comply to the best of my judgment.

1st. Clover is suited to being grazed, and although there may be more loss than if cut for soiling, yet the ground is less deteriorated, and cattle will thrive better when running at large than if soiled; as an instance, they soon get tired on eating grass given daily to them, and when they appear to be satisfied, if turned into a pasture they will go to feeding heartily.

2d. Soiling I consider more economical than grazing, yet the latter is preferable as stated above.

3d. Lucerne is better adapted to soiling than common red clover; it will yield more green food, is an earlier grass, and can be cut more frequently than clover.

4th. Orchard Grass when young makes excellent pasture, but cattle are not fond of it when grown strong or about six inches high, until which time it is better food than clover, but as the latter will last all summer, it is upon the whole a better pasture.

5th. Herds grass is well adapted to grazing.

6th and 7th. It is unquestionably judicious to sow Clover with Orchard Grass, whether intended for hay or soiling, and the latter requires cutting quite as soon as the former, and with us is always ready for hay when in early blossom; if later it becomes coarse and harsh for hay. Two bushels of Orchard Grass seed and two quarts clover are proper for an acre; the former being very light, should be sown in a calm damp day, and each kind separately; the Orchard Grass should be cross sown, say one bushel each way, to make it vegetate more evenly.

8th. I do not consider that more seed is required when intended for grazing than for hay, but I would not graze the first year until a crop of hay had been taken off, and in one week after being mown, it will be good pasturage, and so continue until covered with snow; we generally mow the first week in June.

9th. I consider a mixture of Orchard Grass, Herds Grass, English Grass, and Red Clover, best adapted for pasture in the state of Virginia.

Very respectfully, I am, gentlemen,
Your obt. servt.

HENRY THOMPSON.

Baltimore, 18th June, 1835.

AGRICULTURAL SOCIETIES—INDIANA LAW.

The legislature of Indiana, at its late session, passed an act "*for the encouragement of Agriculture*," of which we shall give an abstract, by way of shewing our readers the deep and laudable interest taken by this youthful member of the confederacy, in the business of agriculture—how early and how properly their attention has been turned to the preservation of the soil of that fertile state, and how paternal is the care by which they endeavor to promote the objects and interests of husbandry.

It is made the duty of the Board doing county business in each county, [county commissioners.] annually, commencing in the present month of May, until an agricultural society shall be formed within such county, to cause notice to be given in such manner as in their opinion may be best calculated to give general publicity throughout the county, that there will be held at the usual place of holding courts, on a day to be named, a meeting of the citizens of the county for the purpose of organizing a *County Agricultural Society*. When such meeting convenes, it is made the duty of some one of the commissioners to have a vote taken, to determine whether a society shall be formed or not. If twenty or more of the persons present are in favor of the measure, they may immediately proceed to the election of officers, and the organization of a *County Agricultural Society*. If less than twenty should be found in favor of the proposition, a subsequent meeting is to be called within ninety days.

On the application of any five persons, who are free-holders, to the county board, for the formation of an agricultural society, in any township, it is made the duty of such Board to call a meeting for that purpose. Each township society to be considered as auxiliary to the county society, and to be entitled to one representative in the annual meeting of such societies. Where no county society may have been formed, the township society is to be so considered, and all subsequently formed societies as auxiliaries.

The officers of each society are to consist of a president, vice president, corresponding and recording secretary, treasurer, and one or more curators, as the society may determine, for each township in the county, who shall constitute a board of managers; these are to be elected annually by the society, to hold their offices until successors are chosen. The treasurer is required to enter into bond for the faithful discharge of his duties, and his bond to be recorded in the recorder's office of the county, and also filed with the papers of the society. At each annual meeting, before the election of the officers, the society are required to determine by vote, what shall be the amount of tax to be paid by each member the en-

suing year, which is never to exceed five dollars, nor be less than fifty cents, in any year, on each member. On the election of officers, a certificate is to be made out, testifying that the society has elected its officers agreeably to the provisions of the act, which is to be recorded in the office of the county recorder, and so soon as this requisition shall have been complied with, the members of such society, and their successors are to be imbued with all the attributes of a body corporate, to have continuance forever, to be capable in law and equity to sue and be sued, and exercise all the other functions enuring to chartered companies. The board of managers, (five of whom are a quorum,) have power to make and alter bye-laws, to determine for what articles, animals, modes of husbandry, agricultural essays, crops, domestic manufactures, or other matters or improvements connected with agriculture, mechanic arts, or rural and domestic economy, they will confer prizes or premiums; to fix the amount, places of exhibitions or fairs; appoint all necessary subordinate officers; fill up vacancies occurring in the recess of their annual meetings; provide for the admission of members, and to fix the places and manner of holding elections, ten days notice of which is to be given, and to perform all other acts necessary for carrying into effect the objects of the society. The Board is bound to hold a meeting between the first day of October and the first day of December, in each year, and make out an annual report, setting forth their number of members, amount of money paid in, the amount expended, the general condition of agriculture in their county, the principal articles of produce and manufacture therein; with the quantity, quality, and value of each, as nearly as can be ascertained; the influence their society has exerted on the agriculture of their county, and the results promised thereby, with such other matters, on agricultural improvements, or intelligence, as, in their opinion, may be useful to the public, and to appoint a delegate to attend the meeting of the *state society*, which we shall presently more particularly allude to. The report above mentioned is to be transmitted through the delegate, together with a certificate of his appointment, to the *state society*. The Board of Managers are empowered to use a common seal to verify their official acts; may receive donations in lands or other property for the use of the society: provided they shall not hold real estate above the value of five hundred dollars for a longer period than one year, unless the same be used as farms or gardens for agricultural experiments or purposes.

The county commissioners are authorized to appropriate fifty dollars, annually, to promote the objects of the county society.

No funds of the society to be applied to any other purpose than for the promotion of those for which the society was formed. Every member of a society to be allowed to withdraw, on giving notice to the treasurer, and paying his dues.

The State Board of Agriculture is to consist of five members, to be appointed by the governor, who are to hold their offices for five years and until successors are duly appointed. This board is invested with power to fill up vacancies occurring in their own body; possess all the corporate and politic powers granted to county societies by the act, by and under the style of the "*Indiana*

State Board of Agriculture." The persons appointed to this board, are immediately to organize, by appointing their officers, and when organized, to collect from county societies and from all other sources to them accessible, such information as shall be calculated to promote the agricultural interests of the state; to give such directions or instructions to the county societies as may tend to produce system, uniformity, and efficiency of action, to prepare, procure, publish and circulate such agricultural tracts or other works, and conduct such agricultural experiments as may be ordered by the legislature or county societies; to record or file all the papers of county societies committed to their care, to make an annual report to the legislature, embracing a statement of their own proceedings, an abstract report from the several county societies, and such other information and recommendations as in their judgments would be interesting and useful to the agricultural community, and perform such other duties as shall be prescribed by the legislature or the state society.

An annual meeting of the State Board, on the second Monday in December, in each year, is to be held, and the delegates from the county societies, which are to constitute and be known, as the "*State Agricultural Society of Indiana*;" the object of which, is, to devise plans of operations, means of diffusing agricultural information, and to give an efficient impulse, by their combined action and influence, to the promotion and advancement of the objects had in view by the legislature.

[From the Intelligencer and Expositor.]

IMPROVEMENT OF SOIL.

A distinguished foreign Agriculturist, Archibald Gorrie, on the subject of green vegetable matter, states that "Vetches, &c. ploughed in, are very effective manure," (under this article may be included all sorts of green manure,) and that amongst the most active plants employed as manure, I have found the Sinapis, ploughed in fresh, &c.; and again—"other weeds, such as nettles, thistles, ragwort, &c. produce crops superior to farm yard dung. *Potato stems*, ploughed in, on clover lea, for wheat, I have found to produce crops exceeding by two bolls per acre, in quantity, with more proportionate weight of straw, the other parts of the same field, manured with farm yard dung, but otherwise under the same circumstances. The stems from three acres of good potatoes, will manure an acre for wheat, to much better purpose, than fifteen tons of farm yard dung. I may mention an experiment, I this year made with *pea straw*, converted into dung without the aid of cattle. Having something of that sort on hand about the middle of last May, and being in want of some loads of manure to finish a potato field, I had the peas thrashed at the mill, and the straws and chaff carried to the side of the potato field, and made up like a large hot bed, giving each layer of straw an ample watering. Fermentation soon commenced and by the fifth day, the mass was so far decomposed, as to be easily filled into the carts. The effluvia, in filling, was almost intolerable. It was in this state, and in

the bottom of the drills, the setts of potatoes planted above, and the earth ploughed over the whole. Notwithstanding the dry nature of the ground, &c., that part manured with decomposed *pea straw*, yielded a better return than where the farm yard dung was applied.

Here I will remind the reader, that every result produced on the *potato*, would be the same on our *corn* crops. The idea will naturally present itself, that, recollecting the experiment of Mr. Young, (detailed in a former paper) if the *pea straw* had been saturated with the liquid part of the manure, or dung, the result would have been prodigiously increased. It goes to place in a most striking light, the value of even dried vegetable matter, when applied to promote the growth of plants, after being even partially decomposed.

It also ought to occur to the reflecting reader, that if this effect can be produced by dried *pea straw*, simply fermented with the aid of water, that our singularly large masses of *sweet potato vines*, is an invaluable article in the dungstead, as an aid to produce a superior compost manure. It cannot be doubted but if three acres of *Irish potato vines*, will sufficiently manure one acre, two acres of our *sweet potato vines*, would certainly produce the same result. I am led to doubt from actual trial, whether, there is any other vegetable matter, capable of giving so much aid to vegetation when properly applied, as the vine of the *sweet potato*. Thousands of the rank weeds that cover our fields, fill the lanes, and abound in our forests, annually, are superior in their effect on vegetation, when properly managed to the plants spoken of so highly by Mr. Gorrie, as producing such valuable effects, when applied as a manure; yet our stupidity permits them to rise and progress to maturity, die and become dissipated by the winds of heaven, while we go whining about the unproductiveness of our "uplands," or perchance go rolling about on the surface of the earth, in pursuit of that which Heaven would be justified in denying, to our profligate use of its best earthly blessings.

An additional experiment by a gentleman who now stands high as an agriculturist, exhibits the effect of green vegetable matter when accessible to roots of plants, and in a decomposing state in aiding vegetation. On such subjects, his name is high authority. J. D. Parkes states: "I had a trench opened of sufficient length to receive six setts of potatoes; under three of these setts, I placed *green cabbage leaves*, but the other three had nothing but the soil. When the crop was dug, the plants over the cabbage leaves yielded about double the produce of the others."

Rapacious must be that disposition that will not be fully satisfied with a profit of one hundred per cent, on any labour and capital bestowed, and equally senseless that, that would not try to secure it.

PLANTER.

THE DURHAM SHORT HORN YEARLING BULL, advertised in this number, is represented to us as being one of the most beautiful animals of his age in the country. He is thorough bred, and has all the best points of his admirable race.

GRASS—ESSAY No. 3.

Containing an account of several satisfactory experiments made in the culture of the *Ribbon Grass*,* by Abednego Robinson, of Portsmouth, New Hampshire.

I wish to make a few remarks on some experiments that I am making, though now in their infancy, on a species of grass here named and known as the *Ribbon Grass*. This early disclosure of results, as far as they have gone, is rendered the more necessary, inasmuch as I have recently seen an extract from a letter of mine in an Agricultural paper which though not intended for the public eye, found its way to the press. To this course I have not the slightest objection; but on the contrary, will feel especially happy at all times, if what I may say should be of service to my countrymen, of letting whatever I may write be published. The circumstance to which I allude was this. I mentioned in a letter to a friend, that I had seen a patch of *Ribbon Grass*, in a very flourishing state on a wet, boggy spot of ground, and of my full belief of its being susceptible of being very extensively and profitably cultivated, and of my intention of trying the experiment.—As this has been communicated to the public, and as I have had a very favorable account of it from a gentleman in Connecticut, an experienced and practical farmer, and of his determination of entering into its culture immediately, I deem it proper that I should make known my own experiments and opinion of this grass, believing as I do that it will prove a most valuable acquisition to the cultivated grasses, and a great blessing to the people of the South in particular.

A neighbour of mine, (Capt. John Simpson, living in Greenland,) knowing I had made some experiments on Grasses, observed to me that he had a patch of *Ribbon Grass* on a springy, boggy piece of ground, which it was worth my while to see. It was his belief, from its luxuriant growth in the bog, and the circumstance of its expelling all other grasses, taking full possession of the soil, and affording two full crops in the season, and from the fact that all kinds of stock were very fond of it, that it might be cultivated to great advantage. This excited my curiosity, and I soon called on the gentleman to satisfy it, and was surprised at the beauty and richness of the grass. It grew on a bog at a small distance from a living spring, where the water descended and spread through the grass all the season. The appearance of the neighboring grass in the same situation, was very ordinary, being thin, flat-leaved, short, and nearly worthless,—whereas the *Ribbon Grass*, in every particular, wore the most beautiful appearance of any grass I had ever beheld. It was then in its vigor, and in full bloom, every leaf being expanded, wide and thick, so that the eye could not penetrate through it. Each leaf has one or more stripes lengthwise, differing, on close scrutiny, from each other, either in the number of stripes, or their form or shade. This grass averaged about four feet in height, and stood perfectly erect. It is possessed of a fine solid stalk, having an inviting and luscious ap-

* This grass is known by several names, as, *Ribbon Grass*, *Puzzle Grass*, and *Fancy Grass*.

pearance as fodder. I took a clean lock of it, and another of Herds' Grass, and offered them both together to my Horse, and found him quite as fond of the *Ribbon* as of the *Herds' Grass*.* Capt. Simpson states that he has observed that his stock were more fond of it than of his best hay of other kinds. This patch would amount to about one square rod.

I engaged the seed, not knowing what it produced, having never particularly observed the grass before; I accordingly applied at the proper time as was supposed, and reaped the heads, but was able to discover but very few seeds, from 1 to 3 to the head. Being certain that we were full early, a part was suffered to remain till later in the season,—when by a re-examination it was found in the same condition. I beat and rubbed out the chaff; but could discover only a few small seeds. I sowed it in good season, with the greatest care, in my garden, hoping that in the chaff, there was more than what I could discover, which would vegetate. I sowed it in drills, to be sure to have it well covered, and that I should not mistake other grasses for it. There appeared to come up a few white blades, which I supposed to be young ribbon grass; these few, however, dwindled off one by one, till all disappeared, the ground never having been disturbed since, and I have not one plant to show from these seeds.—Hence I conclude it cannot be propagated from the seed.

Having a very favorable opinion of the grass, I looked for some way to propagate it, and concluding that it might be multiplied from the root, as hops and many vegetables are, I accordingly engaged one half of the patch, to take it in the spring. I prepared my ground (40 rods) by ploughing in my low ground in the fall, the ground varying from soft to very soft mud. The spring being wet, the ground uncommonly soft and muddy, I postponed the setting of it out, I think, till June, when I went for my wagon load of turf, the grass was then from four to eight inches long. Early in the spring it had had a dead appearance, but at this time it had become pretty well sprung up; some old stubs were dead. Perhaps this situation was one of the most trying of any to be found. It grew where ice made to a great thickness from the water spraying from the spring all the year. Mr. Simpson has informed me since I took away one half of his turf of the *Ribbon Grass*, that it sprung immediately up in the same place, and produced a crop quite as good as before. Since his closer observations, he says he esteems the grass more highly than at first.

The manner in which this grass was planted in the bog, was this. He had a tuft of it growing for ornament in his garden, in a very rich soil; which he occasionally ploughed, and finding the ribbon grass spread a little too far, he ploughed off some of the roots, gathered them and threw them into the bog; he found they took root, spread and flourished as I have stated. I observed when getting my grass, there were some low spots covered with water, where the grass sprung up stronger and larger, being apparently more in its element.—

* Mr. Robinson means *timothy*, that being the name by which it is designated to the eastward.

Capt. Simpson's garden is of the richest soil among us; yet it is evident that one rod of the bog will produce as much as four in his garden. Immediately after getting home with my turf, I commenced chopping it up, taking care to divide the tufts according to the stalks, leaving from one to three in each piece, chopping them with a sharp spade, into pieces, from one to four inches square, setting out about 40 square rods, about two feet apart, without any manure; and setting a few for experiments, in the middle furrow where the water was constantly issuing nearly all the season. None of them failed of living, and all have taken root, shot out and spread considerably; some few to meet each other. Those in the dead furrow appear every way as thrifty as those on the bed. I had the curiosity to try the experiment by sticking one stock of this grass without root in the mud, where the water continued to issue: it appeared to grow as well as those with the root; and shot out with branches. This method of propagation is more facile than from the root. I pressed several tufts into holes in a bog where the water would rise to the top of the tufts, (this is among fresh grass,) here it shot out and appears in its element, and will in all probability spread and drive away all the other grasses. I also sunk some into what is called a quagmire, where it is so soft as not to bear a cat; here I sunk the tufts level with the water; these have the appearance of being perfectly in their element. All these I have lately surveyed since our severe cold, and those in the wettest places appear least affected. I set some of them out on some of the most barren soil, under a forest of white oaks, where nothing of consequence will grow: they all live there, and will probably produce something, perhaps one ton to the acre; if it will do this on very barren lands, it may be well to cover them over with it. I have set it in my front yard and in my garden, on warm soil of tolerable quality, bordering on common grass, in part for ornament. A portion of this was manured and hoed; here it is perceivable that the higher the culture the greater the product as it respects high ground. It is demonstrated from my experiments, and Capt. Simpson's discovery, that this grass is truly *amphibious*. It will do well on *high dry lands*, and it will thrive in a *bog* or even in *water*. I do not know how deep a water it will grow in, but I presume it will grow in shoal, especially *running water*. Is it not evident that this grass possesses very valuable properties, and must prove superior to most other grasses?—Yes, for it not only grows luxuriantly and in abundance in a *quagmire* where nothing of any value has ever been known to be produced before, but its roots are of such a tough nature, that a sward is soon produced that will bear a cart and oxen to pass over it. It has another good quality:—although the circumstance of this grass not producing seed for propagation, seems at first view to lessen its value—yet when we consider the evils resulting from many troublesome grasses that spread from seed, and that no limits can be set them; we may, with propriety, esteem it a virtue in this fast-rooted grass, that limits, can be set to it, that our valuable tillage ground may never be impeded with its roots, and that our waste and unproductive bogs may be easily changed to the most productive portions of

our farms. As to what *Ribbon Grass* will do in pasture, I know nothing. I have my doubts whether it will succeed, as I think it is not thick and downy enough, to bear repeated trampling and cropping close to the ground. It is possible, however, from its hardness, wherever it has been known by me, that it may endure the hardship of being pastured; if so, I have a right to conclude from all its other properties, that it will prove far more valuable than any species of grass yet introduced into culture (the *Gama* not yet being fully known,) and if any farmers at the North or South, have waste bogs that are eye-sores within their enclosures, let them try the experiment of the culture of this Grass; it will not be costly, even if they should not succeed.

ABEDNEGO ROBINSON,
Of Portsmouth, N. H.

THE BREEDER & MANAGER.

PROTECTION TO SHEEP.—The Ohio Farmer of the 15th inst. contains the following letter on this very interesting subject from Dr. S. D. Martin, a highly intelligent gentleman of Clark county, Kentucky.

"Clarke co., Ky. May 19, 1835.

It is known to those who have tried the experiment, that sheep put into the same enclosure with cattle that are in good order, or cows having with them young calves, are completely protected by them, from the attacks of dogs; and I believe they would also be protected from the attacks of wolves, though of this last I have no experience, the wolves having been exterminated from this section long since.

These remarks are made in reference to the large breed of cattle we have in this county; but it is believed that *any* cattle that are tolerably fat, will show the same dislike to the dog.

S. D. MARTIN."

Dr. Martin also recommends, as a protection to the water-melon vine from the striped bug, that a dozen pumpkin seed be planted in each hill with the water melons. The northern orange pumpkin is the best for the purpose. The bug being fonder of the pumpkin than the melon will eat it in preference to the melon vine. When the water-melon vine has grown out of danger, the pumpkin-vines may be removed from the hill.

A small quantity of fine salt sprinkled about vines will prevent the attacks of the cut worm.

Extracts from the last edition of the "Complete Grazier."
ON THE ECONOMY AND MANAGEMENT OF THE DAIRY.

On the produce of a Dairy.

The produce of a dairy is to be regarded in a two-fold view, as it respects *quantity* and *value*. Both depend in a great degree upon management; for if the cow be injudiciously treated, or the butter and cheese be badly made, both the product and the price will be materially diminished. There is no part of farming more steadily profitable than the dairy; but, at the same time, none demands greater judgment and attention.

Of the three objects of the dairy—selling the milk, or, as it is commonly called, *cow-keeping*; *making butter and cheese*; and *suckling*;—the first is generally the most profitable, at the usual price obtained for the milk. It can, however, be only carried on in the immediate vicinity of large towns; and even there, the expense of providing fodder, and the fluctuations of its price, while that of milk seldom changes, together with the injury to the health and consequent value of their cows, from the close confinement to which they are usually subjected, and the nature of the food supplied for the purpose of producing an extraordinary flow of milk, often render it a hazardous, and always an unpleasant business.

The making of butter and cheese, which may be distinctively termed *the dairy*, ranks next in the scale of profit; though we cannot but observe that this is contradicted in a late and very minute account of an extensive farm in the Vale of Berkeley, published under the sanction of the Society for the Diffusion of Useful Knowledge.* However this may be, a well fed cow, of a good breed, will produce, on an average, 180 lbs. of butter in the season; and this, where there is an immediate market for it while fresh, together with the value of the skim-milk, either in feeding pigs or making skim-milk cheese, will pay better than cheese alone. The common calculation is, indeed, 150 lbs.;† but this is made upon mixed stock, which afford no certain data. In the Epping district, where no particular attention is paid to the selection of stock, and where there is an indiscriminate mixture of Devon, Suffolk, Leicester, Holderness and Scotch, the calculation, in a well managed dairy, amounts to

viz:	212 lbs.
6 lbs. per week, during twenty-six weeks	156
4 lbs. per week, during fourteen weeks	56†

In forty weeks, which is full four weeks sooner than they need be generally allowed to go dry, and there is no doubt that, with proper care in the choice of the cow, and proper pasture to support them, that calculation would be supported in good years; it might not in parching seasons, but then all dairy produce must suffer equally. Mr. Aiton's calculation is, as we have already seen, 250 lbs. per annum; but that is for the best milkers of a very superior stock, and although it may be diffi-

* See the Report of the Gloucestershire Farms, No. IV. in the twenty-first number of the Farmer's Series of the Library of Useful Knowledge.

† In the Sussex Agricultural Survey there is an account of the produce of the Duke of Richmond's dairy; from which it appears that the cows, all Suffolk, produced an average of only 136 lbs. in the season; but it does not mention how they were fed; probably they were pastured in the park.

The same survey mentions a Sussex cow, that for some weeks after calving gave ten pounds of butter, and twelve pounds of cheese per week; and another is mentioned in the Hampshire Report that yielded from fifteen to sixteen pounds of butter, during part of the season: besides many other instances of equally extraordinary produce.

† Essex Agricultural Survey, Vol. II. p. 239.

cult to reach that quantity in any other than a very select dairy, yet there can be little doubt that, with proper attention to breed and feeding, the Epping average may be maintained.

The same gentleman calculates that 28 gallons of milk produce 14 lbs. of cheese, which presuming, as he does, that each cow gives a thousand gallons in the year, would give 857 lbs. of cheese,* and Mr. Ratston, another eminent Scotch dairyman, quoted by Mr. Aiton, says "that he would not keep a cow on his farm that did not yield her own value, or her weight, in sweet-milk cheese every year."

The average product of *full-milk cheese* in the best English dairies, where the whole milk and cream are used, cannot, however, be estimated at more than four cwt. In Leicestershire, indeed, and on other deep grazing soils, that carry heavy stock, a well managed cow is reckoned to make from three to five hundred, long weight of 120 lbs.,† besides supporting her calf until it can be weaned; but such cows require full three acres of the best meadows, for summer and winter keep, and it is not in the power of every farmer, if he even have the stock, to procure such land to maintain them. In Somersetshire, the average is four cwt. and a half;‡ in Essex, not so high;§ and Mr. Marshall states that of all the midland counties at something more than three cwt.¶

Suckling is generally considered the least profitable, as well as the most precarious, both from the accidents to which calves are liable, and the more variable price of veal than of butter and cheese: but it is also the least troublesome; and probably that and the making of butter combined, are the most advantageous; as thus: supposing a steady weekly demand for butter throughout the year, then the most advisable plan might be, to keep such a number of cows as would supply that demand during the winter; and in summer, when butter is cheap and veal in demand, to apply the extra milk, beyond the quantity required for the usual consumption of butter, to suckling calves, either for the market, or for stock, as may best suit the ulterior views of the farmer. This must, however, depend on the situation of the farm; for that may not always afford an opportunity for the acquisition of a succession of calves for suckling, or a market for them when

* *Dairy Husbandry*, p. 53. It is much to be regretted that Scotch writers on husbandry do not take the trouble to reduce their provincial weights into the common standard. Three different ones are in use, and unless they are distinctly specified, much confusion is occasioned in calculations: Mr. Aiton's words are "fifty-five pints (*Scotch*) will produce one stone (*county weight*) of full milk cheese." Now the above calculation is grounded on the Scotch pint containing two English quarts, and the Ayrshire stone 16 lbs. of 24 oz., but in some places the pound consists of only twenty-two ounces and a half.

† Leicester Agricultural Survey, pp. 154 and 227. Cheshire do. p. 271.

‡ Somerset Agricultural Survey, 3d Edit. p. 251.

§ Essex Agricultural Survey, Vol. II. p. 271.

¶ Rural Economy of the Midland Counties, 2d Edit. Vol. I. p. 326.

fat; or it may not be adapted for the rearing of stock; and in such cases, the best application of the skim-milk is either to feed pigs, or to make skim-milk cheese. The usual time required for fattening calves for the butcher has been already stated to be ten to twelve weeks;* perhaps less in summer, when the milk is abundant and rich; and more when it decreases in quantity and quality. But as the calf does not require the entire milk of the cow which has calved it, for some weeks after its birth, the cow will, for a short period, support two; and two cows, calving at different periods, may be calculated to fatten seven calves between them in the year. Compared with *grazing*, every branch of dairy-husbandry will probably be found the most profitable; but the trouble and difficulty of management so far exceeds the mere feeding of cattle for the shambles, that it can only be carried on, in most instances, to a much more limited extent. It has also the superiority in other points of considerable importance on farms where the mixed system of tillage and grazing is adopted, that it does not require so rich a soil as that for fattening beasts, and that it produces food for pigs, or calves, and thus, by nourishing more animals creates additional manure and a profitable consumption of the crops on the spot. It has been calculated, that the herbage which will add 112 lbs. to the weight of an ox, will enable a dairy cow to yield 450 gallons of milk; which, upon reference to our previous statements of the average produce of milk in butter, cheese, or veal, and pork, will be found to exceed the return in meat, after making every fair allowance for the additional expense of management. Mr. Aiton estimates it at more than double;† but his statements have been combated, and, to that extent at least, are certainly questionable.

In *feeding pigs*, it has been found that four cows will, in the season, fatten a pig of 40 pounds weight, to twelve score, which is fifty pounds each cow, besides keeping the calves until weaned; and pigs, it may be remarked, have been fattened to great weights upon milk alone.

Some dairymen allow two hogs to five cows, also rearing the calves; but experience proves, that two cows will support a two year old hog until he is put up to fatten. In the neighborhood of a good market, it will, however, be most profitable to fatten porkers.

Of *skim-milk cheese*, the quantity may be calculated at two cwt. from each cow; but in comparing the two modes of employing the milk, there must be deducted from the product of this application of it the value of the dung that would have been made by the pigs.

Throughout the system of dairy management, the vigilant eye of the principal ought carefully to pervade, as it rarely happens that servants are to be found who will give that minute attention to every particular, which is so indispensably necessary to ensure success. On this account, it is more likely that a dairy-farm of a moderate size—one for instance that will keep 10 to 20 cows—will, if well managed, afford a larger proportionate profit than one of a greater extent; because

* See Book I. Chap. VII.

† *Dairy Husbandry*, p. 171.

in the former case, the farmer's wife and daughters can more easily superintend, or perhaps perform a considerable part of the dairy operations themselves; and this is always better done by them than it can ever be expected to be by hired servants. No branch of husbandry, in fact, deserves and requires such unremitting attention. "If," Sir John Sinclair very justly remarks, "a few spoonfuls of milk are left in the udder of the cow at milking—if any one of the implements used in the dairy be allowed to be tainted by neglect—or if the dairy-house be kept dirty, or out of order—if the milk is either too hot or too cold at coagulating—if too much or too little rennet is put into the milk—if the whey is not speedily taken off—if too much or too little salt is applied—if the butter is too slowly or too hastily churned—or if other minute attentions are neglected, the milk will be in a great measure lost. If these nice operations occurred only once a month, or once a week they might be easily guarded against; but, as they require to be observed through every stage of the process, and almost every hour of the day, the *most vigilant attention* must be kept up throughout the whole season. This is not to be expected from hired servants. The wives and daughters of farmers, therefore, having a greater interest in the concern, are more likely to bestow that constant, anxious, and unremitting attention to the dairy, without which it cannot be rendered productive."*

* Sir John Sinclair on the Husbandry of Scotland, Vol. II. p. 124.

FOREIGN ABSTRACT.

The Constitution Frigate has arrived at New York, from Plymouth, England, whence she sailed on the 17th May. Our late minister at France, Mr. Livingston, came passenger. His reception at New York, by his old townsmen, was warm and no doubt highly gratifying to his feelings.

In speaking on the subject of his late mission, the New York papers say:

"We are glad to learn from the conversation of Mr. Livingston that his return to the United States is not to be taken as an evil omen. Among the reasons for it is the desire to put the President in possession of his views more fully than he could well do by letter. He has not perceived among the people or in the Government of France, any hostile disposition towards us. On the whole, we find nothing to shake our often expressed confidence, that our affairs with France will be brought to a satisfactory and friendly issue. Mr. Livingston will soon repair to Washington, and no doubt government will in some way put the people in possession of the impressions made by his statements."

In Mexico General *Santa Anna*, the newly created *Dictator*, has gained a decisive victory over the opposing troops. What have the people of South America, and our North American neighbor, Mexico, gained by their revolutions?

Later.—An arrival at New York brings London dates to the 17th, and Liverpool to the 20th May, both inclusive.

The ministry of lord Melbourne appears to be dissolving from mere weakness—reports of some

two or three resignations were rife, but as they are but reports, we shall not name the individuals. It is supposed that Lord John Russell will succeed in his election for the borough of Stroud.

The agriculturists in some districts in England were in a state of riot in consequence of the new poor law act, and it had been found necessary to call out the police.

From France, nothing additional on the score of our indemnities. The prosecution of the press, seems to be a favorite with the liberal government of France. There was a slight tumult in Paris on the night of the 15th May.

The war in Spain it is said is on the eve of being brought to a termination by a marriage between the young queen and the eldest son of Don Carlos.

The king of Belgium had very unceremoniously dissolved the Representative Chamber, and thereby given great offence. The Chamber being itself taken by surprise manifested the utmost astonishment and indignation, by rising, surrounding the tribunal and venting their feelings in so noisy a manner as to drown the voice of the president.

The sales of cotton at Liverpool for the three days preceding the 20th May, were 11,000 bales; the market was steady, and full prices obtained.

DOMESTIC SUMMARY.

The amount of toll received upon all the New York canals for April and May, is \$368,204,10 cts.; this exceeds the collections of 1834, \$67,551,11 cts. and those of 1833, \$42,870,106.

The ship Washington bound from New York to Mobile, struck on the Crossing Rocks reef on the 17th April, and bilged in about two hours—cargo principally saved, though in a damaged state—the vessel a total wreck.

Robert J. Walker, Esq. has been appointed Senator of the U. S. for the state of Mississippi by the governor, to supply the vacancy occasioned by the expiration of the term of Mr. Poindexter.

The Providence (Rhode Island) Journal states that the Rail Road recently carried into operation between that city and Boston, has monopolized all the business on the road, and that the stages have nothing to do.

The disputed boundary question between Ohio and Michigan, has been settled for the present, by a virtual reference of the subject to the consideration of the next congress. We rejoice at this, and trust it may be finally adjusted so as to do justice to both parties.

This city on Saturday afternoon, was visited with a very severe wind and thunder storm—Two houses in Albemarle street were unroofed; several trees were blown down about the city.—The lightning struck one of the chimneys of the Court House and knocked it down, the bricks falling in the inside of the house. Among several persons who took shelter in the Court House, was a son of the venerable Judge Marshall from Virginia, on his way to join his father now lying ill at Philadelphia; one of the bricks fell on his head and fractured his skull. Medical aid was immediately called in and the operation of trepanning performed. He lies, as may be supposed, dangerously ill; but hopes are entertained of his recovery; which we trust in God may

be speedily realized. Considerable damage was done to barns, fences, &c. on the line of the York road extending a few miles from the city.

A most destructive storm visited Philadelphia on Friday last. Dock street, near the Delaware river, a street more than 100 feet, wide presented an entire sheet of water from Front street to Third street—many of the cellars being filled to the ceiling; the bar room of Dock ward Hotel was a foot deep in the bar room. Little Dock street suffered in a similar way. The loss in sugars and other groceries, hardware, casks of liquors with the bungs out, cotton yarn, &c. is very considerable.

A worm which is styled the army worm, from its moving forward, in its work of destruction, in solid masses, is making great ravages in the western states, particularly in the Rye fields and meadows. When it first makes its appearance, it is about an inch long, slender, of a dark brown, varying to black, colour, with white streaks on the side—the head amber color and hard as a flint. In five or six days it attains its growth—about 2 inches in length. When of the latter size, it is represented as devouring a large blade of grass in two minutes.

Dr. Wm. H. Mowbry has been tried in the Superior Court of Iredell Co. N. Carolina, on the charge of negro stealing, found guilty and sentenced to be hung. He was to have been executed on the 19th inst. Mowbry is from Georgia.

MISCELLANEOUS.

TO A LADY GARDENING.

BY THOMAS MOORE.

O, could we do with this world of ours
As thou dost with thy garden bowers,
Reject the weeds and keep the flowers,
What a heaven on earth we'd make it?
So bright a dwelling should be our own,
So warranted free from sigh or frown,
That angels soon would be coming down,
By the week or month to take it.

Like those gay flies that wing through air,
And in themselves a lustre bear,
A stock of light, still, ready there,
Whenever they wish to use it;
So in this world I'd make for thee,
Our hearts shall all like fire-flies be,
And the flash of wit or poesy

Break forth whenever we close it.
While every joy that glads our sphere
Hath still some shadow hovering near,
In this new world of ours, my dear,
Such shadows all will be omitted;
Unless they re like that graceful one,
Which, when thou'rt dancing in the sun,
Still near the leaves a charm upon
Each spot where it hath flitted!

TO MAKE BLACKBERRY WINE.—Press the juice out lightly through a cloth, so as not to permit much of the pulp to pass through. To every quart of the juice add two quarts of water, and three pounds of clean brown sugar. Put the mixture in a jug or keg which must be filled with it. Let it stand with a thin cloth over the mouth or bung of the vessel, until the fermentation has ceased, which may be known by putting the ear to the aperture. If the whizzing noise has ceased, the fermentation is completed. Draw it off immediately, leaving all the sediment at the bottom

—throw it out, wash the vessel, and strain the liquor into it, through a clean cloth, and stop it up tight. No spirit must be put into it. It will be fit for use in three or four months, but the older it is the better.

Good currant wine may be made in the same way.—*Tennessee Farmer.*

Remarks by the editor of the Farmer & Gardener.—The currant wine should have an addition of half a pint of brandy to a gallon of the mixture, otherwise it would probably not keep, owing to the large quantity of vegetable acid contained in the currants. If we were to make either of the wines for our own use, we should use the best loaf instead of brown sugar, as the strong flavor of the latter would most likely injure the more delicate one peculiar to each of these fruits.

NEW WATER WHEEL.—The U. S. Gazette recently contained the following notice of a newly invented water wheel now exhibiting in the city of Philadelphia:

"IMPORTANT INVENTION.—Gideon Hotchkiss, Esq. of Windsor, Broome Co. New York, heretofore favorably known as one of the most ingenious mechanics of the state, has invented a new species of reaction Water-wheel, for which he has obtained a patent: and which bids fair, we are assured, to outrival all other machinery of the kind heretofore in use. It is small in size, runs vertically, entirely under water, and proves to be not only well adapted to machinery in general, but particularly to Saw-mills. In its application to saw-mills, it combines all the advantages of the geared re-action wheel, and yet is more simple and permanent than the flutter-wheel.—The whole propelling power is obtained without either cogs or straps, and being under water, is neither liable to decay, to be destroyed by fire, or obstructed by ice.—Mr. Hotchkiss' Mills are cheap in construction, all possess advantages so obvious, separate from the saving of expense, that mill owners where they are known, upon the Susquehanna, Delaware, Alleghany, and the neighboring small streams, are already engaged in tearing out their old machinery, and introducing them. Mather & Sprague, in the vicinity of Binghamton; Thomas & Johnson, Great Bend, Pa., Stiles & Whitaker, Port Deposit; Jacob Radiker, Colchester, Delaware county; Caleb Cornwall, Newark, Tioga county; Nichols & Hayte, Painted Post; and Forbes & Co., Olean Point, have these improved Mills in operation.

CONTENTS OF THIS NUMBER.

Notice of an article on Soiling, Grazing, and Grasses—Do. of Mr. Robinson's essay on the Ribbon Grass—Do. of an abstract of the Indiana Law to encourage Agricultural Societies—Burnet Grass—Rye Grass—Protection of Figs from Frost—Wheat Crop—Peaches, &c.—H. Thompson, Esq. on Grazing, Soiling, and Grasses—Abstract of the Law of Indiana to encourage Agricultural Societies—Improvement of Soils—Notice of a splendid Short Horn Bull—Essay on Ribbon Grass—Protection of Sheep—Do. to Water Melon Vines—Economy and management of the Dairy—Foreign Abstract—Domestic summary—Moore to a Lady Gardening—To make Blackberry Wine—Newly invented Water Wheel—Prices Current, &c.—Advertisements.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,	bushel.	2 50	
CATTLE, on the hoof,	100lbs.	7 00	
Slaughtered,			
CORN, yellow,	bushel.	90	95
White,		95	98
COTTON, Virginia,	pound.	17 1/2	18
North Carolina,			
Upland,		18 1/2	20
FEATHERS,	pound.	37	40
FLAXSEED,	bushel.	1 37 1/2	1 50
FLOUR & MEAL—Best wh. wh't fam	barrel.	8 50	9 00
Do. do. baker's,		8 00	8 50
Do. do. Superfine,		7 00	7 25
Super Howard street,		7 00	7 25
" " wagon price,		6 50	
City Mills, extra,			
Do.		7 00	
Susquehanna,		6 75	
Rye,		5 00	5 25
Kiln-dried Meal, in bbls. hhd.		20 00	
do. in bbls. bbl.		4 37 1/2	4 50
GRASS SEEDS, red Clover,	bushel.	5 00	5 25
Timothy (herds of the north)		2 50	3 00
Orchard,		none	
Tall meadow Oat,		2 00	2 50
Herds, or red top,		1 00	1 25
HAY, in bulk,	ton.	18 00	20 00
HEMP, country, dew rotted,	pound.	6	7
" " water rotted,		7	8
HOGS, on the hoof,	100lb.		
Slaughtered,			
HOPS—first sort,	pound.	12	
second,		10	
refuse,		8	
LIME,	bushel.	33	35
MUSTARD SEED, Domestic,		5 00	6 00
OATS,		50	53
PEAS, red eye,	bushel.		
Black eye,		1 25	
Lady,			
PLASTER PARIS, in the stone,	ton.		3 12
Ground,	barrel.	1 37	
PALMA CHRISTA BEAN,	bushel.	2 00	
RAGE,	pound.	3	4
RYE,	bushel.	95	97
Susquehanna,		95	1 00
TOBACCO, crop, common,	100 lbs	4 00	5 00
" brown and red,		5 00	7 00
" fine red,		7 00	9 00
" " wrapper, suitable " "			
" for segars,		6 00	12 00
" yellow and red,		8 00	12 00
" yellow,		9 00	12 00
" fine yellow,		12 00	16 00
Seconds, as in quality,		4 00	5 00
" ground leaf,		5 00	9 00
Virginia,		5 00	10 00
Rappahannock,			
Kentucky,		6 00	9 00
WHEAT, white,	bushel.	1 50	1 53
Red,		1 45	1 47
WHISKEY, 1st pf. in bbls.	gallon.	37	37 1/2
" " in bbls.		36 1/2	37
" " wagon price,		33	33 1/2
WAGON FREIGHTS, to Pittsburgh,	100 lbs	1 12	
To Wheeling,		1 25	
WOOL, Prime & Saxon Fleeces,	pound.	62 to 75	26 to 28
Full Merino,		52	62 24 26
Three fourths Merino,		45	52 23 24
One half do.		40	45 23 24
Common & one fourth Meri.		35	40 22 24
Pulled,		38	40 23 26

FOR SALE,

A TWO years old three-fourths Devon BULL. He is of fine form and medium size—he has been fed as dry cattle usually are. Having no use for him, his price will be very low—only \$25.
June 9th.

SINCLAIR & MOORE.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.		
BACON, hams, new, Balt. cured	pound.	11 1/2	
Shoulders,		10	10 1/2
Middlings,		10	10 1/2
Assorted, country,		9 1/2	
BUTTER, printed, in lbs. & half lbs.		18 1/2	25
Roll,			
CIDER,	barrel.		
CALVES, three to six weeks old,	each.	3 00	6 00
COWS, new milch,		17 00	30 00
Dry,		8 00	12 00
CORN MEAL, for family use,	100lbs.	2 00	2 10
CHOP RYE,		2 00	2 10
EGGS,	dozen.		
FISH, Shad, No. 1, t'd 7 75; untr d	barrel.	7 25	
Herrings, salted, No. 1,		firm	4 50
Mackerel, No. 2 & 3, none; No. 1,		do	7 00
Cod, salted,	cwt.	2 25	2 75
LAMBS, alive,	each.		
Slaughtered,	quart r		
LARD,	pound.	10	10 1/2
ONIONS,	bushel.		
POULTRY, Fowls,	dozen.		
Ducks,			
POTATOES, Irish,	bushel.	62 1/2	87 1/2
Sweet,			
TURNIPS,			
VEAL, fore quarters,	pound.		
Hind do.			

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel W. Chester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	U. S. Bank,	par	VIRGINIA.
Branch at Baltimore,	do		Farmers Bank of Virginia, 2a
Other Branches,	do		Bank of Virginia,
MARYLAND.			Branch at Fredericksburg do
Banks in Baltimore,	par		Petersburg,
Hagerstown,	2a		Norfolk,
Frederick,	do		Winchester,
Westminster,	do		Lynchburg,
Farmers' Bank of Mary'd, do			Danville,
Do. payable at Easton,	do		Bank of the Valley,
Salisbury,	5 per ct. dis.		Branch at Romney,
Cumberland,	2a		Do. Charlestown,
Millington,	do		Do. Leesburg,
DISTRICT.			Wheeling Banks,
Washington,			Ohio Banks, generally 3a3 1/2
Georgetown,	Banks, 1.		New Jersey Banks gen. 1 1/2a 2
Alexandria,			New York City,
PENNSYLVANIA.			New York State,
Philadelphia,	2a		Massachusetts,
Chambersburg,	2a		Connecticut,
Gettysburg,	do		New Hampshire,
Pittsburg,	1 1/2a 2		Maine,
York,	2a		Rhode Island,
Other Pennsylvania Bks. 1 1/2a 2			North Carolina,
Delaware [under \$5],	3a 4		South Carolina,
Do. [over \$5],	3a 1		Georgia,
Michigan Banks,	5a		New Orleans,
Canadian do.	5a		

VALUABLE STOCK FOR SALE.

A FULL-BRED Durham short horn yearling BULL, a very superior animal; a 7-8 blood, same age; also two COWS, 4 years old, 3-4 blood, in calf by a full-bred Bull. Pedigrees given in full. Applications for any of the above cattle to be made to the Editor of the Farmer and Gardener, by whom the terms will be made known. Letters from a distance must be post paid.
June 30th.

DEVON COW AND CALF.

FOR sale, a first rate DEVON COW, five years old this spring, of the best blood and most beautiful form. She is altogether one of the most perfect animals of her kind, and is in calf to a first rate Devon Bull. She has also by her side a BULL CALF, two months old, equal in all respects to any other calf of his kind, and age. The price of the two animals is \$200, and they will be delivered in Baltimore. Address

I. I. HITCHCOCK, Philadelphia.

June 9th, 1835.

3t.

LARGE WHITE FLAT TURNIP SEED, &c.

JUST RECEIVED,

550 LBS. large White Flat, and Red Top TURNIP SEED, (growth 1834,) raised at the Clairmont Nurseries, by R. Sinclair, Senr. from the finest and best shaped roots. The perfect success of Turnip crops produced from these seeds for the last 8 years, and the general satisfaction expressed by those who have tried them, added to the increased annual demand for the articles from Eastern Seedsmen and others, is sufficient proof of its superior quality.

It is recommended "to sow the seed of either kind about the 10th August, on new cleared land, or well tilled clay or loam—quantity of seed required to crop one acre of ground 4 to 12 lbs.; if the latter quantity is sown it will be necessary to cross the plants with a harrow, after which follow with hoes, leaving the plants about 12 inches apart." For further information relative to preparation of seed, cultivation, &c. see R. Sinclair's remarks on Turnip crops in the American Farmer, volume 8, page 138. Price \$1 per lb. and a liberal discount to those who purchase to sell again.

Also, early round Dutch Turnip Seed, Norfolk or large white, white Tankard, yellow Bullock, Ruta Baga, and Dale's new Hybrid Turnip Seeds, at 75 cts. to \$2 per lb.

PICKLING CUCUMBER SEED of best sorts, Embrace, Brussels Sprouts. Lettuce of various sorts, among which are brown Dutch; large white Cabbage and Cilicia—the three most esteemed sorts; YELLOW TURNIP RADISH, and BLUE CURLED GREENS, or DELAWARE KALE, a superior sort of fall sowing—both of the latter articles were raised by Robert Sinclair, Senr., with his usual care, from plants selected expressly for the purpose.

R. SINCLAIR, Jr.

At Sinclair & Moore's Maryland Agricultural Repository.
June 30

DALE'S NEW HYBRID TURNIP.

THE subscriber now offers to the agriculturists a new and decidedly superior variety of Turnip, originated by R. Dale, Esq. an intelligent farmer, near Edinburgh, Scotland; it was obtained by unwearied attention in crossing the Swedish or Ruta Baga Turnip; it is superior in size and flavor to the Ruta Baga; is closer and finer in texture; it is as rapid in its growth as the white Flat Turnip. In fact, it includes the great desideratum in the selection of a proper variety of the Turnip which is to obtain the greatest possible weight at a given expense of manure. This Variety seems to be more adapted to this end than any other sort introduced; it will be found superior in quality to any of the White Field Turnips, and keeps longer than any of them, and very near as long as the Ruta Baga—the color is yellow—the shape oblong. Price 25 cents per ounce. The season for sowing is at hand.

R. SINCLAIR, Jr.

At Sinclair & Moore's Maryland Agricultural Repository.
June 30th.

TERMS OF THIS PAPER.

1 Price five dollars per annum, payable in advance. When this is done, 50 cents worth of any kind of seeds on hand will be delivered or sent to the order of the subscriber with his receipt.

2. The manner of payment which is preferable to any other for distant subscribers, is by check or draft on some responsible party here, or else by remittance of a current bank note; and to obviate all objection to mail transmission, the conductors assume the risk.

3. Subscriptions are always charged BY THE YEAR, and never for a shorter term. When once sent to a subscriber the paper will not be discontinued (except at the discretion of the publishers) without a special order, on receipt of which, a discontinuance will be entered, to take effect at the END of the current year of subscription.

4. Subscribers may receive the work by mail either in weekly numbers, or in monthly or quarterly portions; or else in a volume (ending in May annually), handsomely pressed, half bound and lettered (to match with the American Farmer) by such conveyance as they may direct: but the \$5 must in all these cases be paid in advance.

ADVERTISEMENTS relating to any of the subjects of this paper will be inserted once at one dollar per square, or at that rate for more than a square, and at half that rate for each repetition.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 10.

BALTIMORE, MD. JULY 7, 1835.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, JULY 7, 1835.

✂ We have just received a most interesting letter on the prospects of the crops in Lancaster county, Pa., from one of the most intelligent agriculturists of that state, and we are happy to learn, that that rich county will produce far above an average crop of wheat the present season. We shall give the whole of his letter in our next.

We insert in the present number, the Address delivered before *The Horticultural Society of Maryland*, at its third anniversary celebration, by FRANCIS H. DAVIDGE, Esq., and respectfully bespeak for it an attentive perusal; venturing to predict that each individual, who may read it, will rise from his labor better satisfied with himself and the delightful theme which the orator has illustrated with so much ingenuity, talent, and good taste. His references to the places of nativity of the several flowers referred to by him, the historical reminiscences which he calls up, together with the detail of facts connected with the culture of flowers in Europe, are highly appropriate and interesting. Nor should we pass over, without particular notice, those chaste and classic allusions, which so beautify the address, and which in his own luxuriant diction, are rendered doubly acceptable to the cultivated mind. The task which Mr. Davidge performed was one encompassed with difficulty. Two master-minds had preceded him, and when we say that, with this disadvantage, he enchaind the attention of an audience distinguished for its learning and judgment, it is meting out to him high praise—but, nevertheless, most richly deserved.

On the whole, the Address is of a character to add to the literary fame of its accomplished author, and we feel assured our readers will thank us for laying before them so rich and sumptuous a literary banquet.

VISIT TO MONTCLAIR.

In our notice of our visit to the establishment of Robert Sinclair, senior, two weeks since, we mentioned the pleasure we had experienced from beholding his beautiful *Greville rose* in bloom, and as we were, for want of room at that time, prevented from extending our remarks to his nursery and farm, we will embrace the present opportunity of doing so.

Having viewed the principal object of our visit, we directed our course to his selections of *Roses*, *Camellias*, and *Carnations*, and were gratified to find them, though not large in numbers, of very choice kinds, embracing as many varieties as any private gentleman need desire. Many of the roses were in bloom, and together with a few of his splendid *Carnations*, which were unfolding their flowers, gave great interest to the effect produced.

His NURSERY and VINEYARD are in the very best condition. Though many of his vines suffered from the intense cold and severity of the frosts of last winter, they are now pushing forward with great vigor, and present a most healthful appearance. The assortment of these latter is sufficiently ample to afford a very full choice of those kinds best adapted to the culture and climate of our country.

Of the nursery of fruit and ornamental trees, we should do injustice to our own feelings were we not to say, that it is filled with nearly every variety of the most favorite and rare sorts in both departments. *Apples*, *peaches*, *pears*, *plums*, *apricots*, *quinces*, *cherries*:—and, in fine, all that is good in the fruit families, are there to be had in their greatest perfection—whether of domestic or foreign origin. Nor should we omit here to particularly direct attention to his nursery of the *Morus Mulicaulis*—the newly introduced *Chinese Mulberry*—a plant which we feel confident is destined to do more for our country than any yet introduced among us. It is, indeed, a most interesting tree, whether regard be had to its appearance, or to the associations connected with its history and noble uses. Profoundly impressed as we are with the lasting benefits which it will confer upon the U. States, we could not look upon its broad, silky and luxuriant leaves, without feeling our admiration instinctively challenged, and most heartily wishing it a cordial welcome among our cultivated trees.

Among the ornamental trees—and they are of numerous tribes—are the beautiful *Linden*, whose flowers are so fragrant, and so grateful to the senses, the *Acacias*, the purple and the rose flowering, the *Ailanthus*, or tree of Heaven, the *Azalea*, the *Beech*, the *Horse Chesnut*, with its showy flowers; the *Larch*, the *Locust*, the air-scenting *Magnolias*, the *Sugar Maple* and the lofty *Tulip*:—and there also is the *Balm of Gilead*, which latter excited our curiosity most. This is a native of the state of Maine, and is of the fir species.—In verity it is a most magnificent and imposing tree: whilst viewing it, we felt the task a most difficult and embarrassing one, which most to admire—the richness and density of its foliage; or the beauty, neatness, and symmetry of its pyramidal form. It possesses properties, we think, which must commend it to popular favor, secure it a place in every gentleman's yard, and render it the chief amongst those trees whose presence so adorn the garden, the court and the lawn.

Whilst we have our pen in hand, we might as well say a passing word of some very superior *GOOSEBERRIES*, of many varieties, which we examined. They are of English origin, and to show their thriftiness, we would mention, that they were received by Mr. Sinclair in January last, and notwithstanding the lateness of the season, and intense cold of the winter, they are now in full bearing, and although not nearly ripe when we saw them, were over two inches in circumference.

Having very minutely examined the nursery, flower and fruit departments, we proceeded to look at the farm. As the fields through which Mr. S. took us, were familiar to our eyes, having in years that are past, quartered them many and many a time: their appearance now present such a contrast to what they formerly were, that it struck us with peculiar force. Where a few years since, the rush and the briar had undisputed possession, now wave, in proud triumph, ample fields of clover, timothy, herds grass, orchard grass, and above them all, shaking its lofty head in defiance of the breeze, stands the tall oat-grass. In one of his fields east of the Herring run,—where we once recollect, to our great discomfort, to have found ourself very unexpectedly knee deep in quagmire,—by judicious draining, he has now growing as fine a crop of rye, as we could wish to see.

But as we have spoken of the grasses, it may not be amiss to state, that the height of the *timothy*, in several parts of the field, excited our curiosity, and on measuring it, found it to be from four feet to four and a half feet high, and the other grasses equally good.

The *corn*, owing to the prevalence of cold and its being in a bottom, was not as high as under more favorable circumstances, it would have been,—it however looked healthful, and gave indications that it was only waiting for a few genial days of sun to shoot ahead. We saw a small patch of *Smithiana* corn, in a fine state of forwardness. This is the very earliest sort, perhaps, in the country, and was introduced into culture in this neighborhood by Mr. Gideon B. Smith, from whom it takes its name.

We were shown several pieces of land in *pota-to culture*—both in rows and in hills—making we should think, as well as we could survey them by the eye, between seven and eight acres; all presenting a very thriving appearance. We saw also, a mixed crop of corn, potatoes, pumpkins, and we think squashes, which were doing well. In the neighborhood of the last, Mr. Sinclair has his "*Piggery*," as the phrase is, in which we saw in different apartments, the "*Barnitz*"—the "*Thin Rind*," and the "*Parkinson*"—all diamonds of the first water—and destined, we presume, to send out their progenies to raise up good breeds of hogs, to substitute for those inferior ones, which, after an ordinary winter, one may almost grasp across the loins, between the points of the second finger and thumb.

We have thus in a hurried manner attempted to give a very imperfect sketch of part of what we saw; but to make the landscape faithful, and to look any thing like the reality, the reader should fill up, with his more skilful pencil, the rude outlines of what we have drawn, so as to make the picture a more just representation, of a well tilled and cleanly kept *farm*, *nursery* and *vineyard*—where economy, sound judgment, and untiring industry, are happily blended together:—*and where nothing is left to be done to-morrow, which can be done to-day.*

GRAZING AND SOILING—GRASSES.—We give to day another communication upon these interesting topics. It is from one of our best farmers, who, to a strong and powerful mind, adds the weight of fifty years experience as a practical farmer. The opinion of such an individual upon a matter connected with the science of agriculture, is entitled to, as it will doubtless receive, the most profound consideration.

THE FARMER.

GRAZING AND SOILING—GRASSES No. 2.
Baltimore, County, June 19, 1835.

Mr. E. P. Roberts,

Sir—I never received your communication of the 10th, on the subject of grasses, grazing, &c. until the 17th instant.

To your first question I answer that clover is suitable to being grazed by cattle, horses, &c., and that it has been the only mode that I have pursued for 50 years past, though some say it is better to cut and soil the cattle with it, but I do not hesitate in saying (even without practical experience) that it must create much more trouble.

2. Having heretofore used *clover* and *timothy* only, I have had but a very limited knowledge of the orchard grass; but have heard many speak highly in favor of it; and have since consulted Col. Josias Green, on the subject, ranking him amongst our first farmers. He also speaks highly in favor of it, and answers your 3d question by saying, that it is proper to sow clover and orchard grass-seed together; and would recommend 2 bushels of orchard grass-seed and one gallon of clover seed to the acre, if sown on hard ground; but if sown with oats on light ground 1½ bushel of orchard grass-seed with a gallon of clover seed is sufficient. To the

4th question, I answer that orchard grass and clover seed mature about the same time, though the orchard grass is not generally so heavy the first year, as the second. To the

5th, and 6th questions, I answer that, in my opinion, 2 bushels of orchard grass-seed is sufficient to the acre, either for hay or grazing, though I speak without practical experience.

To your 7th question, I answer that from what I know of clover, and what I have heard from many persons, of orchard grass, I think that no grass or mixture would probably suit better for either grazing or mowing generally, as the clover, having a *tap-root*, is subject to be drawn out of the ground by alternate *freezing* and *thawing*, while the orchard grass would stand firm and supply the deficiency. To your

8th question, I answer that the quantity of seed of each kind to the acre, is given above, and should all be sown in *March*, or *early* in April. As to preparation of the ground, manuring, &c. my mode is, for easy culture and a sure crop, always to break up my ground in the fall, and as *early* in the spring as practicable, to tear it well to pieces with a heavy harrow; if *hard baked*, harrow it over 2 or 3 times, then spread my lime or manure, or both—if the manure is long, or coarse I *plough* it in, if well rotted and fine, drag it well in with cultivators, then sow the seed, harrow it well in, and if still *cloddy* roll it, though, I think, (*rough* or *smooth*) it is best to roll it, as it closes the pores of the earth around the seed, and consequently has a tendency in some measure to prevent the drought from affecting it injuriously.

I have thus, in haste, given you my *views* on the 8 questions proposed, in my *linsey-woolsey-homespun* way,* should you desire them to visit your friends, please to lend them a plain easy dress that will fit the carcass without compressing the lungs.

Yours respectfully,

THOMAS HILLEN.

*Note by the editor of the Farmer & Gardener.

[No dress could be so appropriate as the *linsey-woolsey* one, in which their intelligent and justly esteemed author has clad his views. Thanking him for his present valuable communication, we hope that he will favor us often with the results of his experience in the business of farming. As there are but few if any more competent to instruct in this, the first of all the sciences, so we know there is no one who would feel more pleasure in honestly conveying his opinions and views on any branch of it than he, himself. Belonging, as he does, to the age of *blue-and-buff*—that era when our country sent forth men worthy of her high destiny—any thing falling from his pen is thrice endeared to us. But why apologize for the *linsey-woolsey-homespun*, even, if his views were thus accounted? Plainness of expression, and manliness of thought, suits the understandings of plain men best, and the farmer will not think the less of an instructor for using terms, to express ideas, which he can comprehend. For ourselves we always think the better of a writer, who marches right up to a subject and breasts it foot to foot at once, without any flourish of trumpets or sounding of gongs. It is for these straight-forward and manly traits in those of the writings of our correspondent that have fallen under our observation, that we have always appreciated them, and which have rendered his opinions of value to us.]

[From the Cultivator.]

WHEAT—CLOVER.

Sing-Sing, April 18, 1835.

I have a piece of wheat which was sown about the middle of last September, on a dry soil, of which I should think nearly two-thirds is dead, with the roots fair in the ground, the cause of the death of which I could not account for, until I read Mr. Hickock's communication, read before the State Agricultural Society, which came in the April number of the Cultivator, the substance of which was, that the saccharine matter designed for the support of the plant is more likely to be destroyed when grain is sowed early, than when it is sowed late. I have another piece which was sown the 4th of October, on wet heavy land, which has survived the winter admirably well, it being difficult to find a spear that has died. I have yet another piece, which was sowed October 20th, of which I suppose the one-third part or one-half is dead. On all the above pieces, wheat was sown at the rate of two bushels per acre, so there is enough left yet.

Last spring I sowed my clover seed, on the same land, at two different times, about five pounds to the acre each time. The first time I sowed near the last of March; the second time the tenth of April. Soon after I sowed the first time, we had a warm rain, and the seed sprouted on the top of the ground any where; soon after we had a severe frost, and I observed that the sprouts of

those seeds which were shot forth on the top of the ground, were killed, whilst those which shot into the ground, were not injured. I further noticed, that such seeds or plants that had burst the shell and unfolded the first two leaves, were killed, whilst those which were still covered by the shell of the seed survived. In fact nearly all the plants of the first sowing were killed, but of that which I sowed the tenth of April, a large proportion lived. I gathered up several seeds of the first sowing, which had sprouted, but still retained their shell, the sprouts whereof had been killed by the frost, and planted them, thinking they might sprout the second time, but not one of them did. It is urged in favor of early sowing, that if the seed is not sowed whilst the ground is freezing and thawing and full of cracks, that the seed will not get in the earth, so as to shoot its roots therein and live, but my opinion is, that if farmers were to sow their clover seed from the 8th to the 15th of April, and harrow and roll, or if the ground is heavy, merely roll it in, they would secure to themselves that great desideratum, a good crop of clover. I further think that a great many of the seeds which fall into the cracks, sink too low down ever to reach the top, and that would suggest the propriety of rolling the ground to press in the seeds that do not fall in the cracks, and thus perhaps secure the life of almost the only plants that can eventually come to perfection. If the ground is harrowed and rolled, I think the seed should be sowed after the harrow, that the cracks may first be filled up; if a plant, after it shows its first leaves, get covered up, (as I think a great part of those which germinate in the crevices do) it is done forever.

I want you, if you please, to inform me through the Cultivator, why the skin of young pigs cracks open, if they eat green clover, and whether you know of any preventive; and also whether it will cause their skin to crack if it is mown and given them in a wilted state.

If you think any of the above is worth publishing, you are at liberty to do it.

With respect, I am your friend,

JESSE RYDER.

JESSE BUEL.

Remark.—We confess ourselves unable to answer satisfactorily, the queries in relation to pigs. [Conductor.]

[Remarks by the Ed. of the Farmer & Gardener.]

The question relative to the skin of young pigs cracking open by feeding on green clover, we are disposed to hold in *dubia*. That the pigs of Mr. Ryder may have been fed on green clover, and that they cracked open, we have not the least doubt; but that this *cracking* is to be referred to the clover, unless produced by surfeit, we are free to confess our disbelief. The pigs may have been given this luscious and succulent food, when from its tender and sweet qualities, they were tempted to eat an over quantum, which, by producing a disruption in the digestive organs, brought on debility and consequent surfeit of the blood, and ultimately manifested itself in the cutaneous affection spoken of by Mr. Ryder. But

whether the disease proceeded from the green clover or not, in that particular case, is not material: it is but a single instance, and does not, for want of the universality of character necessary to constitute the basis of a general rule, operate as an established fact. Persons have suffered severely—if not to the cracking, certainly to the stretching of the skin—from too free indulgence at the table; but we apprehend their dinners are not chargeable with the penalty of their gormandizing; but, on the contrary, that the diseased condition of the system, which supervened, is to be referred to the quantity of food taken into the stomach. Again, a horse if permitted to eat too freely upon new corn will founder, so also, if given water too copiously when warm. In these instances it certainly is not the corn nor the water, which superinduces the specific disease; but the quantity of food consumed in the one case, and want of care, in the other, in not permitting the animal to get cool before he was suffered to drink. We recollect once to have seen a fine little girl labouring under a disease resembling *leprosy*, from eating too freely of blackberries, which she found by the road-side while she was in a very heated condition. Here, we presume, two causes operated to bring about this eruptive condition of her epidermis—to wit, eating too much, and eating when over heated: certain we are, that the blackberries had no *direct* agency in the business; for they, we know, are medicinal in their properties, eminently curative in affections of the intestines, and, at all times, when properly eaten, a most pleasant and innoxious fruit.

A word as to the "*preventive*"—the pigs should be fed *moderately* on green clover—and occasionally given a small quantity of pulverized sulphur. We apprehend if the clover be "mown and given them in a wilted state," that their skins will go scot-free, as a large portion of the temptation to over eating will have been taken away.]

It will be seen by the subjoined *circular* of the Indiana State Board of Agriculture, that the law passed by the last legislature for the encouragement of the farming and planting interests of that state is to be carried into full and vigorous effect. We are gratified at it, and hope it will produce a spirit to create similar institutions in every state in the union. Every other interest have their associations—the merchants have their chambers of commerce, the lawyers, physicians, and mechanics, have their societies, and why should not the farmers and planters have their societies also? Shall all other classes be found alive to whatever concerns them, and the agriculturists, the greatest of them all, be found indifferent to their interests?

AGRICULTURAL.

The Indiana State Board of Agriculture, at their late meeting, held April 28th, 1835, determined to propose premiums or certificates, as their means may admit, for the best essays on several subjects calculated to advance the interests of Agriculture, and have directed me to give public notice thereof accordingly.

1. *On the best Breeds*, and the best methods of breeding and rearing Horses, Cattle, Sheep and Swine.

2. *Horticulture*—particularly the growth and improvement of Fruits.

3. *The culture of the Vine*, and the manufacture of domestic wines.

4. *The growth of the Mulberry*, (particularly the new Chinese) and the production of Silk.

5. *The growth of Timber and live fences*—particularly for stocking the great prairies of the West.

6. *Vegetable Physiognomy*, including the principles of vegetable life, the food of plants, &c.

The board are desirous to promote the investigation of subjects, the casting of light upon which would advance the prosperity of the state, and especially of those employed in agricultural pursuits; and though they are not provided with pecuniary means which will enable them to offer liberal premiums for suitable essays, they yet hope many will be found willing to contribute to the general instruction and benefit of the community, from the high motive of desiring to be useful to their fellow-men.

Essays written on the above subjects should be forwarded to the subscriber before the 20th of July next, and the name of the writer may be sealed up in an enclosed paper, which will not be opened until the merit of the essay shall have been decided upon. The names of the successful competitors will then be published, and their essays either given to the public through the newspapers, or reported to the legislature to be published with the transactions of the Board—or both. And to the writers will be awarded either a premium, or a certificate setting forth the excellence of their articles, &c.

Editors favorable to the cause of Agriculture, will please give the above a few insertions.

M. M. HENKLE, Sec'y. I. S. B. A.

Indianapolis, May 8, 1835.

FIRE BLIGHT IN PEAR TREES.

This manifests itself by the limb or branch affected suddenly withering and the leaves turning black, while the rest of the tree remains healthy. In order to arrest it, and prevent it from extending to the rest of the tree, the diseased branch should be immediately when discovered, cut off some distance below all indications of disease, and burned without delay. Trees already dead with fire blight should be removed altogether, and be destroyed in the same way. Where this course has been constantly and promptly pursued, it has been found completely successful. But where neglected, it soon extends through the orchard, and the whole are ultimately destroyed.—As the season is now approaching when it makes its appearance, cultivators of this fruit should be on the look out, so as to arrest it at its very commencement.

Genesee Farmer.

THE GARDENER.

ADDRESS.

Delivered before the Horticultural Society of Maryland, at its Third Anniversary Celebration, June 4th, 1835. By Francis H. Davidge, Esq.

LADIES AND GENTLEMEN

OF THE HORTICULTURAL SOCIETY:

In accordance with your wishes, expressed through your committee, I propose to discharge the pleasing duty of addressing you on this interesting occasion. It would be affectation on my part to pretend that so great a distinction, coming from such a source, has not gratified me, nor can I shut out the consciousness, that, in making your selection, reference has been had more to sentiments of personal regard, than to any peculiar ability in me to descend worthily on subjects, the grace and beauty of which are so entirely at variance with the dullness and monotony of my ordinary pursuits. To find myself so kindly appreciated by you, is the more acceptable, as great indeed must have been the warmth of that regard which could have induced you, in designating me for so honorable a duty, to pass over the claims of many members of the society, whose high intellectual endowments, ripened scholarship, and familiar acquaintance with the topics to be noticed, are far, very far, superior to mine. Relying on the spirit of friendly indulgence which has thus far shewn itself in my behalf, I shall now proceed to perform my pleasing task, and if in the course of my remarks I shall be so fortunate as to present any thing worthy of the consideration of this enlightened assemblage, or in keeping with the lovely and enchanting scene by which we are surrounded, I shall feel most amply repaid for any exertion which the occasion may have called forth.

Before entering on my subject, I must be permitted, in passing, to advert to the admirable taste displayed in the choice of the season for the celebration in which we are engaged.

The hoary headed dotard *Winter*, after lingering in the lap of Spring, has at length wrapped his shrivelled form in the folds of his snowy mantle, and fled, wearing his crown of withered leaves, gemmed with ice drops, to his native regions of the North, there to dwell until he shall be again permitted to direct his desolating march along our fields, and sweep with ruffian hand, from the face of Nature, the emblems of peace and joy and loveliness. Summoning around him his grim retinue of tempests, he has gone, amid the howlings of the storm, to visit those Arctic wilds which have, from time immemorial, recognized the potency of his iron sceptre. Ever and anon casting a backward glance, and shaking from his streaming locks the sleety torrents of his baffled wrath, he threatens to return and kill the promise of the growing year. To his throne has succeeded bright eyed Spring.

"She moves resplendent thro' the whispering air,
Bright as the morn descends her blushing car,
Each circling wheel a wreath of flowers entwines,
And gemmed with flowers the silken harness shines,
The golden bits with flowery studs are deck'd
And knots of flowers the crimson reins connect.

Fair Spring advancing calls her feather'd quire,
And tunes to softer notes her laughing lyre;
Bids her gay hours on purple pinions move,
And arms her Zephyr's with the shafts of Love.
Pleased Gnomes, ascending from their earthly beds,
Play round her graceful footsteps, as she treads;
Gay Sylphs attendant, beat the fragrant air,
On winnowing wings, and waft her golden hair;
Blue Nymphs emerging leave their sparkling streams,
And fiery forms alight from orient beams,
Musk'd in the rose's lap, fresh dew they shed,
Or breathe celestial odours round her head."

Released from their icy fetters by her magic touch, the streams pursue their way rejoicing and murmur forth their hymn of liberty! The green clad hills uplift their heads in glee, and on their brows are seen gay wreaths of flowers that greet the passing breeze with balmy fragrance. The labor loving Bee has wandered forth to gather sweets, and warblers of the wood attune their throats to new born melodies. All nature is alive and full of ecstasy. The herd set free, now crops the verdant mead in gladness, and proud creation's lord himself, acknowledges her sway, and feels fresh vigour in his pliant frame. The aged sire now sits beside his door, and basking in the genial sun-

shine, loves to see his offspring sport, and hear the music of blythe childhood's laugh. Even the martyr to disease, whom months have seen the tenant of his chamber, now takes his staff and totters forth, to breathe again the air of Heaven and gaze once more on Nature's loveliness. Is not this, then, I would ask, the time when all hearts are warm and full of gladness,

"When the young, the rosy Spring,
Gives to the breeze her spangled wing:
While Virgin Graces, warm with May,
Fling roses o'er her dewy way!"

When the earth prolific swells
With leafy buds and flowery bells;
Gemming shoots the olive twine,
Clusters rich festoon the vine;
All along the branches creeping,
Through the velvet foliage peeping,
Little infant fruits we see
Nursing into luxury!"

that we should assemble and meet together to celebrate creation's jubilee? That, like our sires of old, we should gather the first fruits and the earliest flowers, and offer up, in this, the home of our blessedness, on the shrine of our holiest and most grateful affections, the incense of their loveliness, to the all seeing, all protecting God of our humble adoration. That we, the creatures of his power, should spread before him the outpourings of his bounty, and join in paying the tribute of our thankfulness to that Being whose life-time is eternity.

The subject, of which I am about to speak, is so replete with sweetness and abounds with such a variety of beauties, that, like the Epicure who beholds before him the outspread banquet, I am at a loss where to begin. Even in this age of universal improvement, when the spirit of advancement has fixed its stamp on every department of human knowledge, the notice of the most casual observer must have been attracted by the rapid progress made, within the last thirty years, in that portion of our subject which is connected with the gratifications of the palate, as well as that branch of it, which may be styled ornamental, and makes its appeal to the senses of smell and sight. Plants of the most exquisite taste, flavour and health bestowing qualities, which, until within a few years past, were entirely unknown, or, if seen, were only to be found at the banquets of the most wealthy, have become so domesticated amongst us, and are produced in such rich abundance, as to be no longer strangers at the social board of the most humble. Flowers that but a short time since were cherished and nurtured in the hot houses and conservatories of the rich, for whose enjoyment alone, their endless varieties of tint and sense enrapturing odours were reserved, may now be seen expanding their lovely bosoms to the sunbeams, and exhaling their balmy perfume to the breeze, in the neatly trimmed enclosure of the ordinary citizen.

To the production of a change so welcome, numerous causes have contributed: a passing notice of which may be deemed necessary to a full understanding of the matters of which we are speaking.

Perhaps no portion of the globe is more highly favoured, in point of geographical situation and advantages of climate, than the region by which we are surrounded.—Forming the proper middle ground between the intense and long continued heats of more southern, and the pinching cold of more northern latitudes, our State partakes of the advantages belonging to each without being liable to the objections attached to either. With a summer sufficiently long and warm to bring vegetation to full maturity, we have a winter, of such duration and severity as to prevent the exhaustion consequent upon protracted demands upon the earth, by vegetation too long continued, furnishing its mantle of snows for the protection of those plants, which without such a covering, would fall victims to the intensity of the frost. In addition to these local advantages Providence has kindly furnished, for our benefit, a soil which, although, originally, not extremely fertile, is warm and generous, and containing within it properties eminently adapted to excite and mature vegetable growths, offers, even without the aid of cultivation, a botanical product, the richness and variety of which have attracted the observation and commanded the admiration of all foreigners. It is not strange then, that, under circumstances such as these, combined with some others to which I shall merely advert, the active energies of our people sedulously applied, should have procured results so valuable and so worthy of remark.

All who are here present are of course acquainted, from memory or historical tradition, with the melancholy events which, not very many years since, converted one of the most lovely of the West Indian Isles into a vast field of bloodshed, and compelled such of the unfortunate inhabitants as escaped the general carnage, to seek, in utter destitution, an asylum in foreign lands. To those scenes of horror, the bare mention of which is calculated to call forth a shudder, are we, strange as it may seem, in a great measure indebted for the improvements of which we are so justly proud. In looking for a place of refuge, the wretched outcasts from this modern Eden, guided by chance, or, perhaps we should say, a higher Power, sought our city and its vicinity as their haven of rest, bringing with them the only riches upon which barbarian rapaciousness had not laid its grasp, their intelligence; their moral worth, and that indomitable spirit which makes even misfortune contribute to human happiness.—Compelled to labour for a livelihood, men of rank and learning, of elegance and refinement, made what had previously been a source of pleasure and recreation, tributary to their support, and, by introducing the culture of those fruits with which observation had made them acquainted in the land "where the citron and orange are sweetest of fruit," conferred upon us blessings as lasting as they are invaluable. These circumstances, in connection with the influx of strangers from every part of Europe, who have been forced to leave the places of their nativity by civil commotions, political revolutions, or a desire to worship their Maker in the manner pointed out by their own consciences, and who have brought with them the lights of scientific research or practical experience, have tended to enlarge, in so surprising a degree, the stock of vegetable products, remarkable for their beauty or desirable on account of their usefulness.

It must be admitted that the present excellence of our kitchen and flower gardens is to be attributed, so far as man is concerned, to individual enterprise, but it must not be forgotten that the primary source of these benefits is one to which man's agency is subordinate and infinitely inferior. The fountain head from which these blessings spring is to be found in the Giver of Light, the Great First Cause. Yes, my friends, let us ascend, if you will, the giddy heights of our mountain precipices, untrodden, save by the foot of the hunter or the hardy woodman, and I will shew you, in each crevice of the riven rock, myriads of lovely flowerets trembling in the summer breeze,

"That bloom to blush unseen,
And waste their sweetness on the desert air."

Come, dive with me into the depths of our primeval forests, late the abode of the rude, untutored Indian, and you shall behold the wild Honeysuckle twining its delicate branches around the gnarled oak, and loading the Zephyrs with its sweetness, whilst, at its side, the grapevine bears its blushing honours thick, but unheeded, save by the feathered songsters of the grove. Let us wander over the widely extended prairie, and you shall find the dewberry and the wild strawberry courting the taste with their blushes at every step. Or, if you will rove by the side of the sparkling rivulet, that dances dazzling along its pebbled course, you may pluck hundreds of moisture loving plants, each possessing qualities of rarest worth, where the hand of cultivation never toiled. These are the outpourings of the Almighty's wealth, that, unnurtured by the care of man,

"Return the sweets by Nature given
In softest incense back to heav'n."

Yes my friends, if there be a spot upon the globe where the vegetable kingdom displays its hordes of richest fruits and stores of sweetest flowers, in their fullest and most varied luxuriance, it is the land of our birth, "the loveliest land on the face of the earth." It is here that the Lilac of Persia, the Lily of France, the Rose of England, the golden Broom of Scotland, and, I might almost say, the flowers of every clime may live in sweet companionship together,—whilst the hardy Pine of the North, the Magnolia of the South, the Pride of eastern China and the Acacia of the western forest, may revel in the glorious sunshine and wave their verdant crests, in amorous dalliance with the summer winds.

It may be thought strange, that, in the midst of such advantages, in the very home of fruits and flowers, there should not have been established, until so late a period, an institution devoted to the advancement of so interesting a branch of knowledge, whilst other sections of our country, to which Nature has been less bountiful of her

charms, have for many years cherished and sustained associations formed for that purpose. Be that as it may, the Horticultural Society has been at last established, and I may be permitted to add, in adverting to the salutary effects of its institution, already so strongly manifested in the interest which has been excited in its behalf, that no success which may have thus far attended, or may hereafter await the exertion of those who compose it, can ever repay them for the benefits which must accrue to the community from their laudable undertaking.

In the old world, where the many toil for the few, where the lives of the great are spent in catering to the gratification of their tastes, and, where millions, wrung from the brow of hardy toil, are expended in adorning the luxurious villas of the opulent, purchasing dainties for their tables, the science of fruits and flowers has, from a remote era, been fostered and promoted by the great, in the foremost rank of whom may be seen royalty itself. René, king of Anjou, called the Henry the Fourth of Provence, was the first to introduce to garden culture the Carnation and the Red Rose, whose praises are thus sung by Love's own bard, Anacreon,

"While we invoke the wreathed Spring,
Resplendant Rose! to thee we'll sing;
Resplendant Rose! the flower of flowers,
Whose breath perfumes Olympus' bowers,
Whose virgin blush, of chastened dye
Enchants so much our mortal eye.
Oft has the poet's magic tongue
The Rose's fair luxuriance sung;
And long the Muses, heavenly maids;
Have reared it in their tuneful shades.
When, at the early glance of morn,
It sleeps upon the glittering thorn,
'Tis sweet to dare the tangled fence,
To cull the timid flow'ret thence,
And wipe, with tender hand, away
The tear that on its blushes lay!
'Tis sweet to hold the infant stems,
Yet dropping with Aurora's gems,
And fresh inhale the spicy sighs,
That from the weeping buds arise.
When revel reigns, when mirth is high,
And Bacchus beams in every eye,
Our rosy fillets scent exhale,
And fill with balm the fainting gale!
Oh, there is nought in Nature bright,
Where roses do not shed their light!
When morning paints the Orient skies,
Her fingers burns with roseate dyes!
And when at length, with pale decline,
Its florid beauties fade and pine,
Sweet as in youth its balmy breath
Diffuses odours ev'n in death!"

Henry the Fourth of France, at whose nod kingdoms trembled, wished to connect his people with other nations by a chain of flowers, when he founded the celebrated Garden of Plants at Paris, and it is thus to the zeal of that great monarch, as writers inform us, that we are indebted for the introduction into Europe, of the China Aster, the Indian Pink, the Mignonette of Egypt, the Eastern Tube Rose, the Heliotrope, the Nasturtain, the Persian Jasmine and many other lovely flowers that enrich the autumnal Flora of the present age, which had previously been limited, to use their own expression, to "the verdant chaplet of vine leaves."

In this new world of ours, where free institutions forbid the existence of the tree of Royalty, under whose chilling shade man droops and declines, where the accumulation of overgrown fortunes and its necessary attendant, privileged rank, is prevented by the policy of our political establishments, it is peculiarly proper that, so far as the encouragement of the arts and sciences is concerned, their place should be supplied by the institution of societies whose collected intellect and pecuniary ability may be adequate to enterprizes exceeding the scope of private means. Societies that may hold out to ambitious toil suitable rewards, and cherish, by their fostering care, those departments of knowledge, which, without their aid, would sink into a state of lethargy, for the want of sufficient stimulus to activity.

It is now two or three years since a few of our public spirited fellow citizens, acting in accordance with the sentiments I have just expressed, associated themselves under the appellation of "The Horticultural Society of Maryland."

In the organization of this society there is one feature

which I must be permitted to notice, as honorable to the liberality of its founders, and indicative of their just appreciation of that portion of our race to which we are in fact indebted for all the refinement we may possess,—I allude to the introduction of those who form "fair creation's fairest part," as fellow-labourers in the cause of beauty and of taste. If reference be had to the useful part of horticulture, it must be admitted, that those, to whom our social economy has assigned the management of our domestic concerns; including the art of preparing for the gratification of the palate the gifts which Nature has furnished for our use; should possess a knowledge of the respective qualities belonging to the products of the kitchen garden. So, if, on the other hand, we look to that portion of our subject which treats of flowers, I appeal to the gallantry of every gentleman within the sound of my voice, whether it be not right that they, whose peculiar province is beauty and refinement, should join with us in promoting the progress of elegance and taste,—that they, whose presence diffuses light and life throughout the social circle, whose smile gladdens and whose sympathies soothe, soften down, and subdue the asperities of our sterner nature, should unite with us, in arraying the earth in the mantle of its beauties, and spreading before the eye of the Creator, in their most varied luxuriance, the gifts which his goodness has provided for our support or gratification.

Whilst, however, we award to these gentlemen the credit which so justly belongs to them, it must in candour be confessed, that selfishness may have mingled itself with their motives. They must have been aware, that, without the aid of the softer sex, their efforts would have lost half of their efficiency, and must have felt that in this, as well as every other laudable pursuit, the applauding smile of lovely woman is the highest reward for which man can contend.

It may possibly be supposed, by the casual observer, that horticulture does not present to the inquisitive mind a field of research sufficiently extended, or, subjects for examination sufficiently dignified, to justify the formation of societies, or enlist the energies of highly endowed intellect. If there be in this assemblage a single individual who entertains such a sentiment, let me beseech him to dismiss it from his mind as an error too gross to receive, for an instant, his sanction. I would say to him, without the fear of contradiction, that, however interesting it may be to the mineralogist to search after the earth's hidden treasures,—to the geologist, to become versed in the various soils of which the vast globe on which we live is composed,—to the chemist, to ascertain the mysteries of those wonderful affinities that bind together matter in its infinitely diversified forms,—or, to the natural philosopher, to make himself acquainted with the laws by which the *Great First Cause* controls the elements and directs the arcana of creation; neither collectively nor singly do they present more noble aliment for thought, than does the science that treats of vegetable growths, as forming the medium through which the subjects of the sister sciences are made available to life; constituting, as it were, the link that connects the earth with the animated beings by which it is inhabited, and man with the Power whose fiat called him into existence.

It must not for a moment be supposed, that the small portion of ground, enclosed with its tidy fence, along which the Jessamine and the Honeysuckle entwine themselves so gracefully, and its walks and borders, laid out with so much neatness and precision; or the hot house with its pyramids of shelves, its heated air, and its transparent walls, form the limits of the horticulturist's inquiries. They are but the humble means that serve to display, at a glance, the nucleus from which arise reflections and imaginings which are coextensive with wide creation's widest range, and mingle themselves with the aspirations of that principle which assimilates man to his Creator, and constitutes him a candidate for immortality. The learning of the horticulturist should comprehend a knowledge of mineralogy, that he may be aware of the effects produced by the presence of minerals in the soil he cultivates,—of geology, that he may understand what earth is best adapted to the growth and expansion of his charge,—and of natural philosophy, that he may know the laws which govern the elements as component parts of the atmosphere from which the endless varieties of vegetables derive their sustenance. In a word, he should study Nature's mighty plan, in all its parts, that he may comprehend, first, the way in which vegetation may be best promoted; and secondly, the objects to which it may be most advantageously applied.

For even the most ignorant, the garden has irresistible attractions; whether it be as the furnisher of the means of life, in the humble Potato, the poor man's never failing friend, the luxurious Melon, or the luscious Grape,—of gratification to the sight, in the mellow tints of the lowly Heart's ease, the spotless whiteness of the Lily, and the gorgeous coloring of the Cactus Speciosissimus,—or of fascination to the sense of smelling, in the softly breathed odours of the modest Mignonette and the gentle Violet, or the gushing fragrance of the Queen of Flowers, the banquet loving Rose. Yes! these delights are open to the enjoyment of the most uninformed, they spring from instincts of our nature and require no scholarship to give them strength.

To the educated gardener, those objects are sources of a purer, a nobler gratification. They carry with them associations that beguile him of the present, and lead him captive, along the avenues of time, to the deepest recesses of antiquity. They conduct him through the shadowy forms of men and things, long since departed, and connect themselves with the choicest and holiest emancipations of his spirit. They present to his mental vision, those sublime truths of which, fragile as they may be, they have, for ages, been regarded as the lovely emblems, and form the ground work of scientific researches involving the organization of universal being.

The apparently insignificant Mignonette transports the lover to historical lore, to its own native Egypt, and leads him, in fancy, to rove along the prolific borders of the seven mouthed Nile. The land of Cleopatra arises to his imagination, with its long train of departed kings and heroes,—its pyramids that tell of greatness now no more,—its ruined temples and symbolical emblems, the reliques of a religion as imposing as it has been transitory. A shadowy creation bursts upon his vision, and he is made to behold, reflected in the dusky mirror of antiquity, the scenes described in Holy Writ,—he is with God's peculiar people in the house of bondage, and loves to gaze with the deepest veneration on the birth place of the arts and sciences, the hallowed source whence the rivers of knowledge, which in after times have served to quench the intellectual thirst of man, take their origin.

Should the majestic Lily,

"in its vest of lawn,

Whiter than foam upon the crested wave,

Pure as the spirit parted from its grave,

When every stain that earth had left is gone,"

be seen rearing its head above the surrounding plants, he is at once hurried away to the times of a Charlemagne, or a Clovis, and sees unrolled before him the historic scroll of that gallant nation, whose armorial device it has been for so many ages.

The Red and the White Rose speak of the rivalry of the Houses of York and Lancaster for the British throne, and are mingled with the proudest recollections of our fatherland; whilst the Sun Flower brings to mind, the sad narrative of the cruelty and oppression with which a nation, boasting the mild and affectionate precepts of the religion of the cross, overwhelmed the mighty empires of the southern portion of our continent, and sacrificed millions of fellow beings; to gratify its lust for power and wealth.

In the bed of flowers, as well as the assemblage of the proud offspring of the forest, the lover of classic lore finds innumerable remembrances of the delightful fictions, traced by the pen of an Ovid, or the lovely descriptions of the economy of rural life, so sweetly sung in the Georgics of a Virgil. He sees in the attitudes and colorings of the most common plants, analogies, connected with the imaginings of the most gifted Poets, and closely allied to the mythological traditions, so venerated by the revered philosophers and sages of heathen antiquity.

To the lover of natural science, what a field of inquiry is presented in the growth and economy of the simplest flower, the process by which the atmosphere imparts to it health and strength, and the manner in which the peculiar qualities of the soil, wherein it grows, are borne through all its branches, modifying the tints of its blossom, the hue of its leaf, or the glassy smoothness of its stem! It is for him to ascertain what the peculiar something is, of which the atmosphere is derived, in furnishing sustenance to vegetation,—to learn what ingredient of the soil has served to paint the flower's leaf, or what other portion of matter has yielded the glossy polish to its stalk.—Of the great principle which governs these nice processes, man knows and can know nothing, the secret of

life must remain hidden with Him who is the Life of life.

Did the time permit, I might extend these illustrations still further; but we will now turn for a moment to the moralist, to whom the charms of Horticulture address themselves, with, if possible, a more immediate and touching appeal. As he looks from his casement, to inhale the freshness of the morning air, his senses are regaled by all that is lovely to the sight, or grateful to the smell. Gazing around to ascertain the sources of such exquisite delight, he beholds the Honeysuckle and the Jessamine, intertwining their tendrils with those of the Morning Glory and the Passion Flower;—near him he espies the Carnation and the Violet nestling among the rank grass;—the Linden Tree is spreading its delicate foliage, yet dripping with dew, and the stately Oak is waving its verdant boughs, and seems to court the coming breeze. The Tulip Tree uplifts its graceful form, whilst the humble shrubs stretch forth their tiny branches in the attitude of praise and thanksgiving—Yes! they are offering up to their Creator, in silent gratefulness! To the moralist, each plant conveys its peculiar lesson, but taken collectively, they breathe to him a language which sinks deep into the recesses of his heart. They tell of that love which can alone sweeten existence; which clings to the cherished objects of its affections, in joy and in sorrow, with untiring, ever growing fondness; expanding its delicate arms to shelter the beloved being on which it depends for support, and cheering with its close embraces, the idol of its affections amid all the changes and vicissitudes of fickle fortune. They speak of married love, ardent but delicate, tender, devoted and self-forgetting;—of genuine merit, unobtrusive, retiring and bashful, but, by its excellencies, attracting the regard it seems to shun;—of warm-hearted, open-handed hospitality, that knows no bounds to its munificence, and of rural happiness, with which it loves to dwell.

I have thus attempted to give a faint outline of some of the subjects, coming directly or indirectly within the range of the studies and observation of the well informed Horticulturist. That they form a portion, although small, of the vast field of investigation naturally connected with the culture of fruits and flowers, cannot, I think, be doubted by any reflecting mind. Will it be said that such subjects as these are not of sufficient dignity to enlist in their service all of our energies, physical and intellectual? I fearlessly answer No. Let then the members of this association press forward in the noble work, which they have so worthily commenced. Let their watchword ever be *onward*, and although the results of their labors may be, at first, comparatively small, it will be the province of futurity to declare, in all their fulness, the benefits of which they will have been the originators. With such a soil and such a climate as we possess, and a vegetable product of such unbounded variety as that offered by our own country alone, no adequate estimate can at present be made of the advantages to accrue from well concerted, harmonious, action on the part of even the limited number now composing this society. The discovery of America has already introduced to the knowledge of what may be termed the civilized world, a single plant, the Potato, which has deprived famine of half its victims and penury of half its horrors. Who then will undertake to say that, inasmuch as almost all of the powerful assuagers of human misery have been found allied to the vegetable kingdom, there may not remain, among the countless myriads of plants decorating our hills, the names of which are yet unknown, some one that will alleviate still further the "ills that flesh is heir to," and restore man, in some measure, to his primitive exemption from pain? Nay more, is it not possible that, among the bright intelligences roused into activity by the honors conferred by this very society, there may be an American Linnæus, who will present to the world, discoveries of greater importance far, than those which have conferred immortality on the celebrated Swedish naturalist of that name?

In conclusion let me remark, that, as yet, this Association is in the spring tide of its existence, and that, although the dews of public favor have descended softly and refreshingly upon its growth, causing the seeds of future benefits to shoot luxuriantly, and put forth blossoms which promise the richest fruits, it will require the continued sunshine of ardent zeal, to bring these products to their full maturity. Should the chilling air of neglect be permitted to visit too harshly the lively interest and sincere esteem now entertained for its prosperity and utility, or should the weeds of jealousy and distrust be suffered to rear their noxious heads, within the circle of its policy,

there is too much reason to fear that all our hopes may be blasted, and the result of our labors be nothing better than the tares of deceitful promise. To prevent consequences so deplorable, it becomes the duty of every fellow laborer at the task, to guard with unceasing watchfulness, against evils which, if permitted to take root, must require infinite pains to eradicate them, and may, after all our efforts, mar the lovely prospect of our hopes.

At present every thing looks well. The Rose of Beauty uplifts its head, and cheers us with its full blown blushes, and its budding charms;—the Orange Tree of Generosity is holding forth its golden treasures;—the Strawberry of Perfection is already seen in lovely groups, whilst the absence of the Columbine of Folly, leaves room for the Hawthorn of Hope, and the Fig of Longevity;—the Potato of Benevolence is abundant, and we see nothing of the Narcissus of Selfishness, or the Skirrett of Coldness;—the Cabbage of Profit excludes the Dead Leaves of Melancholy, and the Hops of Injustice. It is true, that the Musk Rose of Capricious Beauty adorns our collection, but, as it is accompanied by the Grass of Utility, and as neither the Marigold or Cypress of Despair shew themselves, we may fondly hope, that the future has in store for us the Periwinkles of Sweet Recollections.

Here I must bid you, adieu! and, if my zeal for the cause I advocate, has outstripped my ability to reward the attention so kindly extended to me, or if forgetful of the lapse of moments, I may have descanted too much at length on subjects whose charms so far transcend the powers of even the most gifted, adequately to describe them—If, like the benighted Bee, led on from sweet to sweet,

"Too late I've staid, forgive the crime!
Unheeded fly the hours,
And noiseless falls the foot of time,
That treads o'er fruits and flowers."

[From the New England Farmer.]

SCRAPING FRUIT TREES.

East Hartford, June 15th, 1835.

Mr. Thomas G. Fessenden:

Dear Sir—-I have for the two last years scraped my Apple and Pear trees towards the latter part of June or commencement of July, and think from the experiment it is much the best season to scrape the ross from the body and large limbs of fruit trees, I have ever tried. I prefer to scrape them with a hoe soon after a rain, as they scrape much better when moist.

It is well known that many apple trees bleed, turn black, and are much injured when scraped in the spring season. I knew it was the rule with some farmers (if they had a tree in their orchards that was unthrifty, or was not good to bear) to peel off the whole bark from the body of the tree during the longest days in June, and that a new bark is soon restored at that season. If the trees are scraped abundantly, and some of the bark entirely torn off, they heal immediately, and do not bleed. I cut several decayed limbs from one tree two years since, which healed over much better than when trimmed in the spring. I think the fruit on those trees scraped in the above manner much improved in size, as well as in the general appearance of the trees.

RELIEVING CATTLE CHOKED WITH APPLES,
ROOTS, &c.

I have for about ten years past, succeeded remarkably in relieving cattle when choked with apples, potatoes, &c. by the use of a stiff rope about 6 feet long and 1½ inch in diameter, with a wad of cotton batting placed on the end of the rope, covered with a strong gag, or piece of soft leather, and secured at the end by running a waxed-end through the wad and the rope to prevent the wad from getting off when down the neck of the animal.

The rope should be well greased before it is used, and melted lard turned down the neck of the animal; the rope should be twisted down the neck which will follow the *course of the windpipe*, and force the potato or apple, &c. into the stomach without danger to the life of the animal. I had one piece of old stiff rigging, which saved about ten head of cattle within a few miles of me. New tarred rope will answer; no farmer should be without one constantly by him.

Respectfully, yours, GEORGE OLMSTED.

THE BREEDER & MANAGER.

THE POINTS OF A FINE BAKEWELL BUCK.—

One of the most distinguished agriculturists of the north, recently in writing to us, prescribes the following as the points to be looked for in a fine Bakewell buck:

"Short head, broad forehead, straight back, full chest, broad loins, close twist, full deep thigh, deep round rib, short trotters, wide in his gait behind, houghs inclining a little outward, belly deep and well covered with wool, cod large, shoulder lying well back and thighed down to the hough."

Gentlemen who may feel disposed to introduce the above breed of sheep on their estates, would do well to pay attention to the above directions, as they are from one of the best judges and most observant farmers in the country, a gentleman who in addition to fifty years' experience in the practical pursuits of agriculture, brings a highly enlightened mind, and untiring devotion to all concerned with those pursuits, to direct his judgment to a rightful result.

MISCELLANEOUS.

WORMS AND FLOWERS.

BY MONTGOMERY.

You're spinning for my lady, worm!
Silk garments for the fair;
You're spinning rainbows for a form
More beautiful than air,
When air is bright with sun-beams,
And morning mists arise
From woody vales and mountain streams,
To blue autumnal skies.
You're spinning for my lady, flower!
You're training for my love,
The glory of her summer-bower,
While skylarks soar above:
Go, twine her locks with rose-buds,
Or breathe upon her breast,
While zephyrs curl the water-floods,
And rock the halcyon's nest.
But, oh! there is another worm
Ere long will visit her,
And revel on her lovely form,
In the dark sepulchre,
Yet from that sepulchre shall spring
A flower as sweet as this;
Hard by the nightingale shall sing,
Soft winds its petals kiss.
Frail emblems of frail beauty, ye!
In beauty who would trust?
Since all that charms the eye must be
Consign'd to worms and dust:
Yet like the flower that decks her tomb,
Her spirit shall quit the sod,
To shine in amaranthine bloom,
Fast by the throne of God."

CURE FOR THE DROPSY.

Take 2 gallons of pure strong cider,
 " handful of Featherfew,
 " " " Hoarhound,
 " " " Wormwood,
 " " " Rue,
 " " " Woodbitney,
 3 table spoonfuls of the inside bark of
 Barberry, bruised,
 1 lb Sarsaparilla root,—bruised fine,
 1 lb Horse radish root, do do
 1 oz. Saltpetre,
 1 oz. Steel dust,
 1 Pint mustard seed,
 1 lb Ginger,
 A large handful of cinders from a black-
 smith shop.

Put the whole into a large stone jug, and keep it well stopped, taking care to shake it well four or five times each day, for the first two days, and once a day afterwards. It may be used in 24 hours—or indeed, in four or five—if the case be one of an urgent nature—care being taken to shake the jug every half hour. A half pint of this decoction to be taken at a dose, twice or thrice a day, as the patient can bear it. This quantity should be continued for four or five days, until the swelling begins to subside, when a less quantity will answer, but that will be regulated by the state of the patient. Should he not be able to take so large a dose as half a pint at a time, give him a wine-glassful every hour.

Diet for Dinner.—Any kind of fresh meats, except pork, birds, poultry, &c., to be roasted or boiled dry, and eaten without gravy.

For Breakfast and Dinner.—Rye coffee or chocolate.

Drinks.—Cider to be used freely, a heated iron poker being first put into it. Old Holland gin, and old whiskey may be drank, made into strong toddy.

Bread.—Hard bread or biscuits preferable to any other.

Remarks by the Editor of the Farmer and Gardener.—About thirty years since, the above recipe came into our possession, under the following circumstances:—A neighbor, who was about 60 years of age, had for several months been confined with the dropsy, during which period he had been tapped five or six times, and several gallons of water taken from him; but although all the remedial means within the knowledge of two able Physicians, had been exerted in his behalf, still the predisposition, in his system to accumulate water remained uncontrolled, and he had sunk so low, was so emaciated, that his Physicians discontinued the exhibition of medicines, and gave up his case as incurable. In this stage of the disease, when his family were looking forward with the most painful anticipations for his dissolution, a Mr. Rawlings, hearing of his situation, gave the above prescription, which was immediately prepared and administered as directed. In a few days the unfavorable nature of the symptoms began to disappear, the disease

itself yielded to the treatment; the swelling subsided; the evacuations of the patient became natural, the water, which had been formed in the abdomen and legs, were carried off, the parts affected resumed their wonted healthful appearance, and finally, the patient was restored to good health, and lived many years without having a return of this most painful and difficult disease. The case was so astonishing, and excited so much interest, that we were induced, though very young, to apply to the old gentleman, who politely furnished us with a copy of the receipt, from which we made the above.

WOMAN'S AFFECTION.

The affection of a woman is deeply planted in her bosom, and though it may not be conspicuous amid the sunshine of life, yet when the dark clouds lower, and danger or difficulty menaces the object of her attachment, this noble feeling stands forth revealed, and gives a tone to every action. It is this deep, enduring feeling which urges her to attempt deeds, from which the soul of man would shrink. It has been well said that man may indeed write on constancy, but how truly can woman act it.

In Bertrand's Plague of Marseilles, an affecting incident is related, which shows the disinterested feeling which characterizes female attachment. A young woman was attacked with the Plague; she was well aware of the nature of the horrid disease and seemed only anxious that her husband should escape. During her illness, she uniformly refused all assistance from him—nor would she suffer him to approach her—and carrying the cares for his safety even beyond the term of her life, when she found her last hour approach, she desired him to throw her the end of a long cord, which she fastened round her body, enjoining him with her expiring breath not to touch her corpse, but to drag her by means of this cord to her grave.

FOREIGN ABSTRACT.

There have been several European arrivals since our last. The latest brings London papers to the 30th May.

The most important intelligence relate to the affairs of Spain. General Zumalacareguy, the Commander in Chief of the forces of Don Carlos, carried Trebino on the 13th May, after a dreadful assault. The barracks, the Church-tower, and several other houses, were destroyed. The decided headway making by the rebel troops, had induced the Queen's government to make a demand upon that of France, according to the Quadruple treaty for succour, and it is said the French will furnish 40,000 troops.

The French force at Algiers appear to be surrounded with difficulties.

There is nothing further from France with respect to our indemnities. Our own government, however, have published the letters of Mr. Livingston to that of France on the subject of the "explanation," from which we are confirmed in our former opinion, that no difficulty will arise upon that score. The grounds taken by Mr. L., are perfectly tenable, that no foreign power has a

right to take exception to a communication from the executive to congress—whatever domestic differences there may be among ourselves, upon questions between our own country and any other, this people will present "an undivided front."

Lord John Russell has been returned to Parliament from the borough of Stroud. Mrs. Felicia Hemans died on the 16th May.

DOMESTIC SUMMARY.

In our last we stated the accident which had befallen Mr. Thomas Marshall, the eldest son of the venerable and venerated Chief Justice Marshall, and expressed a hope that he might survive: but our hopes were not to be realized. He died on Monday week last, amidst the regrets of this community, whose sympathies were aroused to the most painful intensity. Mr. Marshall, was, we learn, the father of six children, who, while they may deplore the loss of a kind parent, will have the consolation to know, that with their regrets are mingled those of thousands to whom his memory was endeared by the recollection of his own and the virtues of his revered father.

The Washington Rail road is completed from Baltimore to the district line near Bladensburg, and was formally examined on Wednesday last. Members of Congress, next winter, may Breakfast in this city and be in their places in their respective houses, at the hour of meeting.

The ground on the route of the Wilmington and Susquehanna rail road was broken on the 27th May, on which occasion, an oration was delivered, and other appropriate ceremonies were performed. We sincerely hope it may be speedily completed.

The Cholera prevails in the towns bordering on the western and southwestern waters, Maysville, Ky. Madison, Indiana, several towns and settlements in Illinois, Granvois, and St. Louis, Missouri, and many other places.

A violent hail-storm occurred in Anne Arundel county, Md. on Friday the 26th June, and on the succeeding day, the town of Lynchburg, Va. was visited with one.

The people of the state of Michigan are about to make a rail road from Detroit to lake Michigan.

Brimstone for Cattle.—It is probably not known to many of our farmers that brimstone is valuable for cattle in keeping them from ticks.—These vermin are not only filthy in their appearance, but an injury to cattle. A piece of brimstone as large as a grain of corn, well pulverized, given in a little salt, will cause them to drop off, and prevent others from getting on for 8 or 10 days. I consider brimstone as necessary for a cow in the summer, as salt.—*Southern Farmer.*

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Notice of a Letter from Lancaster, Pa.—Do. of Mr. Davidge's Address—Visit to Montclair—Notice of Mr. Hillen's Letter—Mr. Hillen on Grazing, Soiling, and Grasses—Jesse Ryder on Wheat, Clover, and the cracking of Pig's Skins from eating Clover—The Editor's remarks thereon—Indiana Agricultural Premiums—Fire blight in Pear Trees—Mr. Davidge's Address—Scraping of fruit trees—Relieving choked cattle—Points of a Bakewell buck—Worms and flowers—Cure for the dropsy—Woman's affection—Foreign Abstract—Domestic Summary—Remedy for ticks—Prices current, &c.—Advertisements—terms.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,.....	bushel.	2 50	—
CATTLE, on the hoof,.....	100lbs.	7 00	—
Slaughtered,.....	"	—	—
CORN, yellow,.....	bushel.	93	95
White,.....	"	95	98
COTTON, Virginia,.....	pound.	17½	18
North Carolina,.....	"	—	—
Upland,.....	"	18½	20
FEATHERS,.....	pound.	37	40
FLAXSEED,.....	bushel.	1 37½	1 50
FLOUR & MEAL—Best wh. wh't fam.	barrel.	8 50	9 00
Do. do. baker's,.....	"	8 00	8 50
Do. do. Superfine,.....	"	7 00	7 25
Super Howard street,.....	"	6 75	7 00
" wagon price,.....	"	6 50	—
City Mills, extra,.....	"	—	—
Do.	"	7 00	—
Susquehannah,.....	"	6 75	—
Rye,.....	"	5 00	5 25
Kiln-dried Meal, in hhds. hhd.	20 00	—	—
do. in bbls. bbl.	4 37	4 50	—
GRASS SEEDS, red Clover,.....	bushel.	5 00	5 25
Timothy (herds of the north) ..	"	2 50	3 00
Orchard,.....	"	none	—
Tall meadow Oat,.....	"	2 00	2 50
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.	18 00	20 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	8
Hogs, on the hoof,.....	100lb.	—	—
Slaughtered,.....	"	—	—
HOPS—first sort,.....	pound.	12	—
second,.....	"	10	—
refuse,.....	"	8	—
LIME,.....	bushel.	33	35
MUSTARD SEED, Domestic,.....	"	5 00	6 00
OATS,.....	"	50	53
PEAS, red eye,.....	bushel.	—	—
Black eye,.....	"	—	1 25
Lady,.....	"	—	—
PLASTER PARIS, in the stone,.....	ton.	—	3 12
Ground,.....	barrel.	1 37	—
PALMA CHRISTA BEAN,.....	bushel.	2 00	—
RAGS,.....	pound.	3	4
RYE,.....	bushel.	95	97
Susquehannah,.....	"	95	1 00
TOBACCO, crop, common,.....	100 lbs	4 00	5 00
" brown and red,.....	"	5 00	7 00
" fine red,.....	"	7 00	9 00
" wrappery, suitable	"	—	—
for segars,.....	"	6 00	12 00
" yellow and red,.....	"	8 00	12 00
" yellow,.....	"	9 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"	4 00	5 00
" ground leaf, ..	"	5 00	9 00
Virginia,.....	"	5 00	10 00
Rappahannock,.....	"	—	—
Kentucky,.....	"	6 00	9 00
WHEAT, white,.....	bushel.	1 50	1 53
Red, Susquehannah,.....	"	1 50	1 52
WHISKEY, 1st pf. in bbls.	gallon.	37	37½
" in hhds.	"	36½	37
" wagon price,.....	"	33	33½
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 12	—
To Wheeling, ..	"	1 25	—
WOOL, Prime & Saxon Fleeces, ..	washed, unwashed	62 to 75	26 to 28
Full Merino,.....	"	52	62 24 26
Three fourths Merino,.....	"	45	52 23 24
One half do.	"	40	45 23 24
Common & one fourth Meri.	"	35	40 22 24
Pulled,.....	"	38	40 23 26

FOR SALE,

A TWO years old three-fourths Devon BULL. He is of fine form and medium size—he has been fed as dry cattle usually are. Having no use for him, his price will be very low—only \$25.
June 9th.

SINCLAIR & MOORE.

BALTIMORE PROVISION MARKET.

	PER.	FROM	TO
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured....	pound.	11½	—
Shoulders,.....do.....	"	10	10½
Middlings,.....do.....	"	10	10½
Assorted, country,.....	"	9½	—
BUTTER, printed, in lbs. & half lbs.	"	18½	25
Roll,.....	"	—	—
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old....	each.	3 00	6 00
Cows, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	2 00	2 10
CHOP RYE,.....	"	2 00	2 10
EGGS,.....	dozen.	—	—
FISH, Shad, No. 1, t'd 7 75; untr'd	barrel.	7 25	—
Herrings, salted, No. 1,.....	"	firm	4 50
Mackerel, No. 2&3, none; No. 1, ..	"	do.	7 00
Cod, salted,.....	cwt.	2 25	2 75
LAMBS, alive,.....	each.	—	—
Slaughtered,.....	quart'r	—	—
LARD,.....	pound.	10	10½
ONIONS,.....	bushel.	—	—
POULTRY, Fowls,.....	dozen.	—	—
Ducks,.....	"	—	—
POTATOES, Irish,.....	bushel.	62½	87½
Sweet,.....	"	—	—
TURNIPS,.....	"	—	—
VEAL, fore quarters,.....	pound.	—	—
Hind do.	"	—	—

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	VIRGINIA.
U. S. Bank,.....par	Farmers Bank of Virginia, 2a
Branch at Baltimore,.....do	Bank of Virginia,.....do
Other Branches,.....do	Branch at Fredericksburg do
MARYLAND.	Petersburg,.....do
Banks in Baltimore,.....par	Norfolk,.....do
Hagerstown,.....3a	Winchester,.....do
Frederick,.....do	Lynchburg,.....do
Westminster,.....do	Danville,.....do
Farmers' Bank of Mary'd, do	Bank of the Valley,.....do
Do. payable at Easton,.....do	Branch at Romney,.....do
Salisbury,.....5 per ct. dis.	Do. Charlestown,.....do
Cumberland,.....2a	Do. Leesburg,.....do
Millington,.....do	Wheeling Banks,.....do
DISTRICT.	Ohio Banks, generally 3a½
Washington,.....do	New Jersey Banks gen. 1½a2
Georgetown, Banks, ½.	New York City,.....4a
Alexandria,.....do	New York State,.....2½a3
PENNSYLVANIA.	Massachusetts,.....2a2½
Philadelphia,.....½a	Connecticut,.....2a2½
Chambersburg,.....½a	New Hampshire,.....2a2½
Gettysburg,.....do	Maine,.....2a2½
Pittsburg,.....1½a2	Rhode Island,.....2a2½
York,.....½a	North Carolina,.....3a4
Other Pennsylvania Bks. 1½a2	South Carolina,.....2½a3
Delaware [under \$5].....3a4	Georgia,.....4½a5
Do. [over \$5].....2a1	New Orleans,.....do
Michigan Banks,.....5a	
Canadian do.....5a	

VALUABLE STOCK FOR SALE.

A FULL-BRED Durham short horn yearling BULL, a very superior animal; a 7-8 blood, same age; also two COWS, 4 years old, 3-4 blood, in calf by a full-bred Bull. Pedigrees given in full. Applications for any of the above cattle to be made to the Editor of the Farmer and Gardener, by whom the terms will be made known. Letters from a distance must be post paid.
June 30th.

DEVON COW AND CALF.

FOR sale, a first rate DEVON COW, five years old this spring, of the best blood and most beautiful form. She is altogether one of the most perfect animals of her kind, and is in calf to a first rate Devon Bull. She has also by her side a BULL CALF, two months old, equal in all respects to any other calf of his kind, and age. The price of the two animals is \$200, and they will be delivered in Baltimore. Address
I. I. HITCHCOCK, Philadelphia.
June 9th, 1835.

LARGE WHITE FLAT TURNIP SEED, &c.

JUST RECEIVED,

550 LBS. large White Flat, and Red Top TURNIP SEED, (growth 1834,) raised at the Clairmont Nurseries, by R. Sinclair, Senr. from the finest and best shaped roots. The perfect success of Turnip crops produced from these seeds for the last 8 years, and the general satisfaction expressed by those who have tried them, added to the increased annual demand for the articles from Eastern Seedsmen and others, is sufficient proof of its superior quality.

It is recommended "to sow the seed of either kind about the 10th August, on new cleared land, or well tilled clay or loam—quantity of seed required to crop one acre of ground ½ to 1½ lb.; if the latter quantity is sown it will be necessary to cross the plants with a harrow, after which follow with hoes, leaving the plants about 12 inches apart." For further information relative to preparation of seed, cultivation, &c. see R. Sinclair's remarks on Turnip crops in the American Farmer, volume 8, page 138. Price \$1 per lb. and a liberal discount to those who purchase to sell again.

Also, early round Dutch Turnip Seed, Norfolk or large white, white Tankard, yellow Bullock, Ruta Baga, and Dale's new Hybrid Turnip Seeds, at 75 cts. to \$2 per lb.

PICKLING CUCUMBER SEED of best sorts, Endive, Brussels Sprouts. Lettuce of various sorts, among which are brown Dutch; large white Cabbage and Cilicia—the three most esteemed sorts; YELLOW TURNIP RADISH, and BLUE CURLED GREENS, or DELAWARE KALE, a superior sort of fall sowing—both of the latter articles were raised by Robert Sinclair, Senr., with his usual care, from plants selected expressly for the purpose.
R. SINCLAIR, Jr.

At Sinclair & Moore's Maryland Agricultural Repository.
June 30

DALE'S NEW HYBRED TURNIP.

THE subscriber now offers to the agriculturists a new and decidedly superior variety of Turnip, originated by R. Dale, Esq. an intelligent farmer, near Edinburgh, Scotland; it was obtained by unwearied attention in crossing the Swedish or Ruta Baga Turnip; it is superior in size and flavor to the Ruta Baga; is closer and finer in texture; it is as rapid in its growth as the white Flat Turnip. In fact, it includes the great desideratum in the selection of a proper variety of the Turnip which is to obtain the greatest possible weight at a given expense of manure. This Variety seems to be more adapted to this end than any other sort introduced; it will be found superior in quality to any of the White Field Turnips, and keeps longer than any of them, and very near as long as the Ruta Baga—the color is yellow—the shape oblong. Price 25 cents per ounce. The season for sowing is at hand.
R. SINCLAIR, Jr.

At Sinclair & Moore's Maryland Agricultural Repository.
June. 30th.

TERMS OF THIS PAPER.

1. Price five dollars per annum, payable in advance. When this is done, 50 cents worth of any kind of seeds on hand will be delivered or sent to the order of the subscriber with his receipt.

2. The manner of payment which is preferable to any other for distant subscribers, is by check or draft on some responsible party here, or else by remittance of a current bank note; and to obviate all objection to mail transmission, the conductors assume the risk.

3. Subscriptions are always charged BY THE YEAR, and never for a shorter term. When once sent to a subscriber the paper will not be discontinued (except at the discretion of the publishers) without a special order, on receipt of which, a discontinuance will be entered, to take effect at the end of the current year of subscription.

4. Subscribers may receive the work by mail either in weekly numbers, or in monthly or quarterly portions; or else in a volume (ending in May annually), handsomely pressed, half bound and lettered (to match with the American Farmer) by such conveyance as they may direct: but the \$5 must in all these cases be paid in advance.

ADVERTISEMENTS relating to any of the subjects of this paper will be inserted once at one dollar per square, or at that rate for more than a square, and at half that rate for each repetition.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 11.

BALTIMORE, MD. JULY 14, 1835.

Vol. II

—THIS publication is the *successor* of the late **AMERICAN FARMER**, and is published at the office, on the *west side of Light, near Pratt street*, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, JULY 14, 1835.

Our *reply* to the inquiries of "A Subscriber," have been unavoidably excluded from this week's number, but will appear in our next.

The room occupied in the notices of the death of the late venerable Chief Justice Marshall, precludes our weekly "*summary*" and "*abstract*."

The death of such a man as John Marshall—a man whose greatness was only equalled by his goodness, is a matter in which every man, woman and child, in this union is concerned; for as he lived for his country, adding lustre to her fame by the purity of his private morals, and the lofty unwavering integrity and wisdom of his official decisions, so has he died lamented by all who have hearts to feel, or heads to appreciate his matchless worth.

We publish to-day a letter from a highly intelligent gentleman of Pennsylvania, on the subject of the prospects of the crop in Lancaster county, Pennsylvania, and the value of lime as a manure. We sought his opinion on both these topics, because we knew he would be a safe counsellor, being *competent*, from his *acquirements* and *moral worth*, to give an unbiased opinion on each. The decided tone in which he speaks of lime as a manure should awaken the attention of agriculturists to its importance; for they may rest assured, that every dollar they expend for lime, to be applied to their lands, is so much money placed out at compound interest.

The remarks of our correspondent relative to the *cut-worm*, are worthy of attention. For ourselves we think there is much *reason* in his views; and we hope farmers, generally, will take the subject into consideration.

The communication of our correspondent "S." detailing an experiment connected with the planting of potatoes, is highly interesting. His ex-

periment, as far as a single case can do so, goes far to establish a most important fact, one which should be generally known—that the crown of the potato will come up from two to three weeks sooner than the sides;—and if upon further experiment it should prove to be universal in its result, gardeners and others, will be able to have their potatoes so much earlier in the market, a consummation most devoutly to be wished for.

There is no one at all conversant with the culture of Potatoes, who may have been observant, but must often have noticed the straggling manner in which they have come up, and the inequality observed in the growth of the vines until they respectively reached maturity; to such it will appear, no doubt, as probable that these circumstances are referable to the fact developed by our correspondent,—the superior adaptation of the *crown*, over the *sides* of the potatoes, to the purposes of germination.

There is also another fact which gardeners and others, must often have witnessed on opening the rows of their early patches of potatoes, that some were much more forward than others planted at the same time: now may not this too be referred to the same principle?

The more we think upon the fact presented by our correspondent, the more important it appears in our view. With gardeners and those who *force early* potatoes, it is of moment to have a succession; and to such it will prove a desideratum, should it turn out, on future experiments, to be *uniform* in its results, as the desired end may be attained without encountering the trouble and expense of preparing ground for subsequent plantings, as should the *crowns* be from two to three weeks earlier than the *sides* in vegetating, all the advantages of successive crops may be accomplished by planting them *separately* at the same time.

We conclude our communications on the subject of *grazing*, *soiling*, and the *grasses* best adapted to each, with the letter of Mr. Robert Sinclair, the senior proprietor of this establishment,—whose long experience as a practical farmer entitle his opinions to every consideration,—and in closing these communications on this interesting branch of husbandry, we would most respectfully observe in all deference to the several

gentlemen who have favored us with their views; whether it would not be good economy to have the cows brought into the barn-yard at night, and thus combine the advantages of field feeding, with a judicious *saving of manure*, a thing which a farmer who wishes to maintain his soil in good tilth must never lose sight of.

The letter of Mr. Sinclair was the *first* one received, but through courtesy to the other two gentlemen, whose communications we have already given, we postponed its publication until the *last*.

We had a conversation a few days since with a respectable gentleman from Shenandoah county, Virginia, who assured us, that in his neighborhood there was a pretty general failure of the wheat crop, and that, unless a very great improvement should take place, judging from appearances, the corn crop would prove equally disastrous: and he added, "if I should not be disappointed, we shall have to come to your market, or go somewhere else, for our supply of breadstuffs." To such of our readers as may not be acquainted with the productive character of the Shenandoah lands, we will remark, that in ordinary good seasons, 20, 25 and 30 bushels of wheat are obtained from the acre.

We allude to this fact now to call the attention of the planters and farmers to the propriety, under such prospective circumstances, of planting and sowing a large increase to their usual crops and patches of roots and vegetables for winter use. The Ruta Baga and other turnips should all be sown, the mangel wurtzel, potatoes, carrots, parsnips and beets, might each, with judicious management, be pushed sufficiently forward to do acceptable service before their growth will be arrested by the frosts in the fall. Cabbages should also be pressed into the general levy, to contribute their might towards the great whole. In fine, every species of vegetation, which can be matured, that may be converted into food for horses, cattle, or hogs, should be put under cultivation. If the worst anticipations with regard to the grain crops should be realized, these respective vegetables, if grown, will come into grateful play; if the grain crop should not prove as *deficient* as predicted, to use an old adage,—which though trite, points a most excellent moral,—"*a store is no*

sore"—and these extra crops of roots, will in that case, perform the office of adding to the comfortable "keep" of the stock, while such of their owners, as may be within reach of a market, will find the weight of their purses increased from the proceeds of their sales.

CARROTS AS AN IMPROVER OF BUTTER.—A writer in the *New England Farmer*, says that, according to the suggestion of the editor of that paper in January last, he had tried the effect of carrots as an improver of butter, for several weeks during the last winter. The mode pursued by him in making his experiments, are thus briefly stated by him :

"Our mode has been to take four carrots of the Altringham kind, of about one and a half inches in diameter to cream enough to make ten pounds of butter, and after washing them clean, to grate them and cover them with new milk, and after they have stood ten minutes, to squeeze them through a cloth into the cream, and the effect has been to make the butter come quicker and give it the color and sweetness of May butter; so sweet and waxy has been the butter made in this way, that those persons who have eaten of it, could not believe they were eating winter butter. We consider it the greatest improvement we have ever known in making butter at this season."

SALT AND LIME.—It is recommended by writers on the subject, to sow Salt and Lime over ground infested by Slugs, Snails, Grubs, and other insects of their character. Lime when spread over soil in a hot or caustic state, it is stated, will destroy insects and their larvæ or eggs.—When it becomes slacked and is held in solution by water, it is readily taken up by plants as food, and forms a constituent part of them.

"It is astonishing," says a writer in the *Gardener's Magazine*, "how ignorantly neglectful are the cultivators of the soil, when their crops are devastated by slugs not to dress the soil so as to render its surface quite white, during the promise of a few days dry weather, with caustic lime. It is instant destruction to every slug it falls upon, and those that it misses are destroyed by their coming in contact with it, when removing in search of food."

The *Endless Chain Horse power, and Thrashing Machine*, invented a few years since by Mr. Lane, appears to be working its way to public favor, without any extrinsic aid whatever. Mr. Alvan Armstrong, the proprietor of the patent right for Maryland, seems to have reposed himself upon the merits of the machine alone, and to have left it to be the architect of its own popularity.—A year or two since, he sold out a county interest, for Baltimore county, and the purchasers have been, almost without an effort, gradually introducing the machine into use, and wherever it has

operated, it appears to have earned for itself a good name. We have seen certificates from *Charles Carroll Harper, Esq., H. Schwartz, Esq.,* and from *Joshua Trimble, Esq.,* who have each used it on their respective farms, and speak in high terms of its performance. Mr. Harper says that he :—

"Was much pleased, as it thrashed cleaner, and broke the straw less than he supposed any machine could."

Mr. Schwartz says :—

"I have used Lane's Endless Chain Horse power, and thrashing machine, two seasons, with perfect satisfaction." * * *

"During that time I have not had occasion to make the least repair."

"To have two horses and change them, one hundred bushels a day may with ease be got out clean."

Mr. Trimble says :—

"I have thrashed out one crop of wheat with it, and I do assure you that I am pleased with it, because it occupies so little room that the thrashing can be done in a very small house." * * *

"One horse being quite sufficient in cold weather—it being warm weather when I got out mine, I spelled the horse by an additional one, which I think an advantage; by this means from 80 to 100 bushels may be got out a day."

It will clear the straw of grain equally with any I ever saw thrashed with any other machine; nor does it injure the straw."

We have deemed it due to the agricultural interests to take this brief notice of this machine, and to remark, that the horse power can be applied to almost any other purpose where machinery is to be put in motion, and possesses the advantage, as is proved by the certificate of Mr. Schwartz, of not easily getting out of repair, which is, as every intelligent farmer will readily perceive, a consideration of the very first importance. The facility too, with which this machine and its appendages can be transported from one farm to another, the ease with which it can be set up and put in motion, together with the lowness of its cost, compared with its great advantages, tend to increase its value to a farmer, and to make it an object with him to obtain one.

We commend the following extract from *Black-er's Essay*, to the especial attention of every tiller of the soil. Its good sense, sound practical deductions, and wholesome advice, is apparent in every line of it :

WASTE OF MANURE.—"But as an example may perhaps bring this before you in a stronger point of view than in any other way I can put it, let me suppose that some of you should purchase a little tea at a grocer's; as long as you keep it dry and shut up from the weather, it will preserve its original strength, even for years; but when you put it into a teapot, and pour water on it three or

four times, the strength is all gone, and your tea becomes, I may say useless matter. It is just so with your manure. I see it often placed in such situations that the rain water from your house and offices, and the sweepage from the higher grounds, all run through it; thus every shower floods it day after day, carrying off always some part of the strength, until at length it is left as dead and as useless as the leaves thrown out of the teapot.

"Surely no man in his senses will persist any longer in such gross mismanagement. If you were to observe a man quietly stand by and see his potatoes destroyed, which are to be the chief support of himself and family, you would say he was either mad or a downright idiot; and if this would be your opinion of him, what can you say of yourselves when you stand by and daily look on at the destruction of that manure by which your potatoes are to be produced?"

THE FARMER.

[For the Farmer and Gardener.]

IMPORTANT EXPERIMENT IN POTATO CUTTINGS.

Mr. Roberts—It being desirable among cultivators to produce early vegetables, I take the liberty of noticing through your journal, an experiment on the potato crop, which may possibly be found useful to your subscribers, and cause our markets to be supplied with new potatoes about two weeks earlier than is customary, besides enabling those who plant them to prevent the ragged and uneven appearance which potato crops too generally present when coming up. In order to have a full and satisfactory trial, I caused a large square of ground to be prepared in my garden, and laid it out in four long beds, all well manured. In one of these beds I planted the top or crown of the potatoes, (mercer) in the next, the sides, and in the two last, the crowns and sides promiscuously. The crowns are all up about 8 inches high, and look very flourishing. On examining the bed in which the sides were planted I find them just sprouting, being but about 1 inch from the bulb, the surface of the ground having no appearance of vegetation whatever. The other two beds have come up as they were planted, promiscuously, presenting a very rough and uneven appearance, while some are 8 inches high, others have not made their way through the earth. This patch was planted on the 18th June, and I mention the facts thus far developed, to encourage others to make more careful experiments, on more extensive scales, and to excite a spirit of inquiry: satisfied that we agriculturists have much to learn yet. S.

July 9, 1835.

CROPS IN LANCASTER COUNTY, PA.—LIME AS A MANURE.

Extract from a letter from a respectable agriculturist of Pennsylvania dated, Piqua, Lancaster, Co., June 29, 1835.

Mr. E. P. Roberts,

Dear Sir—In answer to your note which I received a day or two ago, I am happy to say, that in this section of Pennsylvania, we have never had a more flattering prospect of a good crop of wheat than we have at present. In my imme-

diate neighborhood I have never seen a greater likelihood of an abundant harvest, and as far as I have been, the appearance is equally good: indeed, it seems to be admitted by all, that Lancaster county, this year, will produce far above an average crop.

As to the average quantity produced to the acre, I hardly feel willing to express an opinion as I think I should make it under what it is generally supposed to be: had you asked the amount produced on a tolerably well managed farm of 200 acres for the last ten years, I could have answered your question, with some degree of accuracy.* However, I should not hesitate to say that there are many fields this year that will average forty bushels to the acre; but this is more than double what I consider an average crop.—Our prospect of a corn crop is very unfavourable; from present appearances, I don't think we shall have half the usual quantity; the worms, this spring, have been very destructive, and have continued their depredations longer than they generally do; we, however, have not been discouraged from replanting, and in some instances whole fields have been gone over as late as the 10th of the present month—our success depends very much on a favourable season—Sixty bushels to the acre of corn, when it is properly managed, is not unusual, and I have known some few fields that have produced seventy-five and over—but I should call forty bushels, or forty-five, an average crop.

Lime and Plaster of Paris with what our barnyards afford, are the manures used—lime, however, is not used as generally as it should be: to poor lands I think it indispensable; and on our best soil, I have never seen it used but with decided benefits. I consider it almost an error to attempt to farm without the aid of lime, even here, when the land is good, when it can be had at the price we pay for it, which is from ten to twelve dollars per hundred bushels.

The quantity of lime used to the acre is from sixty to one hundred bushels. Barley and oats promise a good crop. Grass unusually heavy, but the weather for three or four days has been unfavourable for hay making.

I am, very respectfully, yours.

*We should be greatly obliged to our esteemed correspondent, if he would favor us with this information, as also, for a statement of the mode of cultivating corn in his county.

CLAIRMONT, 6th Month 20, 1835.

Edward P. Roberts,

Respected Friend—I have received thy letter of the 13th inst., containing 12 queries relative to the culture and suitableness of the most approved species of grasses, for dairy purposes, intended for the information of a gentleman to the South. And while I comply most cheerfully in replying thereto, I hope I shall be excused, at this busy season of the year, for making my answers as concise as possible. I am fully sensible that the subjects to which thou hast called my attention, are vitally important, and are entitled to a more minute and extensive notice than I have leisure now to devote to them, but if a plain account of my opinions and practice, will be of any service to our Southern subscriber and inquirer, or to others, they are at thy service.

1st Query. Is clover suited to being grazed by cattle, horses, &c.—or is it more profitable to cut it and soil the cattle with it?

In reply to this query, I may observe, that Red clover is good for grazing cattle; but in order to derive the full benefit of enriching the land by it, the cattle ought not to graze on it until it is nearly or quite in bloom, whereby the droppings of the cattle, are in some degree covered by the clover, and the evaporation of the more valuable portions of the manure, thus to a considerable extent, prevented. The cattle should be taken off early enough in the fall to leave a good cover, to protect the roots of the clover, and prevent their being drawn out by the winter frosts.—Clover is now generally known to be the best of all grasses for enriching and improving poor land; it should, therefore, be sown with all the varieties of Spear grasses, viz:—Orchard grass, Timothy, Tall Meadow-Oat, and Herds grass, if the latter be sown on dry mellow land.

Although Red clover is not the best grass for grazing cattle, yet it is essential to the grazing, as it fertilizes the land, and thereby promotes the growth of White clover and green grass, *poa pratensis*, which are considered as the richest and most acceptable to cattle of all grasses.

Soiling of cattle in the stalls have two good properties in it, viz. cattle thus fed furnish more manure, and require less land to provide the necessary supplies of provender; but these are not gained without additional expense, and great risk to the health of the cattle, which is certain to be impaired more or less, unless they are permitted to range abroad a part of each day.

2d Query. Is lucerne better suited to soiling milch cows than the common red clover; does it yield more green fodder, and is it earlier?

3d Query. Is orchard grass calculated to being grazed by cattle—does it sustain much loss from the treading down of the cattle while feeding?

Answer to the 2d and 3d queries. The cheapest and earliest article for soiling, is, I think, the Tall Meadow Oat grass—*avena eliator*. The Lucerne is equally early, and as good or better for soiling; but its culture is more difficult and expensive. The Red Clover soon follows them, and when ready to cut we have no occasion for a better article to soil with. The Orchard grass and tall meadow oat, affords the most pasture of any of the Spear grasses I am acquainted with, and will make good and suitable hay for cattle if sown thick, and cut when in flower, or rather before; continuing longer in sandy land than most other grasses and bears the trampling of cattle well.

I shall now answer the following of thy questions, under the same general head:

4th Query. Is it considered judicious to sow clover seed and orchard grass seed together to graze upon?

5th Query. Is it considered sound economy to sow the above grasses together for hay? In either case; what are the respective proportions of seed of each that should be sown to the acre?

6th Query. Will the orchard grass mature sufficiently early to be cut with the clover for hay.

7th Query. What quantity of orchard grass when sown alone, should be sown on an acre intended for hay?

8th Query. Should a larger quantity of orchard grass be sown on an acre intended for grazing than on one intended to be cut for hay.

9th Query. Will Herds grass bear grazing: and is there much loss resulting from the hoofs of the cattle.

10th Which of all the artificial grasses within your knowledge would you prefer for grazing, and which for soiling?

11th Query. Which of the artificial grasses is the most profitable for hay, regard being had to its nutritious quality, facility of curing, and adaptation as food for cattle?

I am in the regular practice of sowing from 5 to 6 quarts of clover seed to the acre, in March, on land that was sowed in the previous fall with Orchard grass, or tall meadow oat. They are in flower about the same time and are well calculated to support the clover, and be mowed together. The requisite quantity of orchard grass seed for an acre, depends much on how well it has been cleaned and prepared for sowing. I sow about 2 bushels when clean, first preparing it as follows:—lay the seed about 4 inches thick on a floor; make it thoroughly damp by repeatedly watering it well, and care should be taken to turn it frequently. It should remain thus for about 36 hours, which renders the seed heavier, causes it to fall freer from the hand, and enables the sower to distribute it more evenly, it not being from its increased specific gravity so liable to be affected by the wind. Another advantage gained is—it vegetates with much greater certainty.

Herds grass makes good hay for Milch cows, being soft and nutritious, but the yield is not equal to other grasses, either for hay or pasture.—It may, however, be sown to profit on cold damp lands, where it thrives better than on dry land, and will grow on land too wet for any of the other grasses enumerated above.

I prefer clover and orchard grass mixed to feed cattle with in hay or pasture: and timothy and clover for horses. Although the clover ripens earlier than the timothy; yet if cut when in bloom, they make a better hay than either do separately. Owing to the astringent quality of the timothy, horses fed alone on it, constantly, become costive, if not feverish, and sometimes both; these being the necessary consequences of such a condition of the bowels, when long continued. This injurious and natural tendency of the timothy, is corrected by the clover; its admixture therefore with the latter is absolutely necessary to the preservation of the health of horses. Should some of the clover when mowed with the timothy be so ripe as to crumble on making it into hay, it should not be considered as a loss; it falls to the ground where it decomposes, and in part repays the soil for what it has abstracted from it, and thus serves to fertilize it and enable it the better to nourish and bring forth its next crop.

12th Query. What quantity of seed of each of the several grasses should be sown,—when—and how should the ground be prepared, manured, &c.

Answer to the 12th query. In order to prepare lands in the best manner for grass seed, all the native grass and weeds must be completely eradicated by the culture of mellowing crops; such as Indian corn, Tobacco, Cotton or Potatoes, or by a cleansing fallow of repeated ploughings and harrowing during the spring and summer; and if not rich enough to produce from five to six barrels,

of five bushels each of corn, to the acre, manure the land and plough it in with a shallow furrow just before sowing the seed. If lime or ashes should be used, it will be best to harrow them in.

I prefer sowing the Spear grass seeds in the latitude of Baltimore from the 1st to the 25th of September. However, on stiff clay they may be sown later, as also on sandy lands, owing to the injurious effects resulting from their heated surface. For every degree south of, and parallel with, Baltimore, and the sea-coast, sow the spear grass seeds about ten days later: and in the spring sow clover seed ten days earlier.

I sow about the same quantity of oat-grass seed as of orchard, and about 5 quarts of timothy seed, and $\frac{1}{2}$ a bushel of Herds. It is the neatest way to sow the spear grasses by themselves: nor do they require, in my opinion, the protection of grain crops; but it is, however, sometimes a convenience to sow these seeds on wheat, rye and oat fields—and often very judicious in a routine of crops. It is not, nevertheless, always best on grazing farms, the shattering grain frequently proving a weed to the succeeding grass crops, whilst those grain crops, themselves, substract much of the nutriment which should have been permitted to, and otherwise would, have sustained the grass.

Respectfully, thy friend,

ROBERT SINCLAIR.

THE CUT WORM—A REMEDY.

Dear Sir—Having heard much said respecting the depredations committed on the corn crop, by the cut worm, I am induced to offer a few reflections, for the benefit of those, who may not be aware of a simple remedy, and one within the reach of all, whose prejudice of education, does not prohibit a trial of the experiment. It is a fact well known to all conversant with agriculture, that this worm is more or less destructive to corn, cabbage, vines, &c. every season: and at the time of preparing the ground for corn, numbers of them may be discovered, thereby showing to the farmer, the possibility of an attack upon his intended crop. Hence I conceive it would be wisdom in him to reflect upon, and avail himself of, the best method to get rid of them. Experience has shown me that in those fields which have been entirely cleansed of all vegetable matter, preparatory to planting, the worms have blighted the hopes of the farmer, while in those fields which had been broken up in the fall, and which, of course, were in some measure overgrown with grass by planting time, had almost entirely escaped.

The reason of this is obvious to every man of reflection. If the worm is an inhabitant of the ground in which the planter intends to deposit his grain, and if the field is entirely deprived of vegetation upon which it may subsist, exclusively of the growing corn, it must of necessity feed on that, and it is therefore but to be expected, that its ravages will be great. There are, I am aware, certain locations, where it would not be expedient to break up the ground in the fall.—But I feel convinced in my own mind, that if farmers generally were to leave a sufficient quantity, of vegetable matter in their fields, they would find it to their interest. If those persons who are in the habit of listing their ground, would

leave the middle until the corn had grown beyond the power of the worm to injure it, they would no doubt obviate the necessity of replanting, beyond a very limited extent. The corn which is planted on the list is quite as easy of cultivation, and derives the necessary sustenance, as much from the decomposition of the vegetable matter enclosed in it, as it would, if the whole were broken up previously to planting. These two methods, I believe, are all that are observed in the preparation of the ground before planting; and if any should think these suggestions worthy of a trial, they will no doubt be fully compensated, or at least find they have guarded against the devastating effects of the cut worm.

A PRACTICAL FARMER.

CRIMSON CLOVER.

The following notice of the *Trifolium incarnatum* is taken from the *Code of Agriculture*, and as this grass is getting into favor, it will not be unacceptable to see it so highly spoken of abroad:

"It is a subject of astonishment that this valuable plant, (*Trifolium incarnatum*) should not have been long ago introduced into this country, and cultivated on an extensive scale. If sown in autumn, after a crop of potatoes or other roots, it produces next spring a crop fit to be cut for soiling cattle, eight days earlier than lucerne, and a fortnight before red clover. Care, however, must be taken to have good seed, and not to sow it too deep. It produces two excellent crops in one year, the first of which should be cut as soon as it comes into flower, and the second will produce a considerable quantity of seed. From its early growth in spring, when other articles for feeding stock with advantage are so difficult to be obtained, it is likely to become a valuable acquisition to British husbandry." If the clover—the seed of which is, we believe, to be had in considerable quantity of the seed-merchants in this country—be sown in spring, it is considered that it will produce a full crop in Scotland in the months of July or August, and must be of great value to those on whose lands the common red clover does not succeed, or where the crop may have partially failed. It is proper to remark, that this is an annual plant, and therefore should only be employed in partial husbandry.

PLASTER AND ASHES—LIME.

A mixture of drawn ashes with plaster when sown renders the operation less distressing to the laborers, whose eyes are apt to be incommoded by the flying of it. It also enables them to strew it more equally, regardless of the wind, which often interrupts the operation, when sown alone. The quantity used will depend mostly on the quantity at command; for persons having more than will afford an equal portion for the plaster, it is usual to mix half and half, and to sow about a bushel of the compound to the acre, or more, as the farmer may choose, depending on the situation of his land, whether it has been plastered before, or not, &c. With the plaster and ashes may also be mixed clover, or other grass seeds, in any proportion desired, when the whole operation can be performed at the same time.

The beneficial effect of lime as a manure is so generally admitted, that, to deny its operations in any instance, is hazarding the charge of skepticism; nevertheless, there are cases in which the zealous farmer is sadly disappointed in the result. Whether it be owing to the soil in a limestone region of country, being already saturated with lime, so as to effervesce strongly with acids, or to some deleterious quality of it, as magnesia, &c., the result is often different from the generally received opinion. Lime should therefore be used experimentally: at first in small quantities, to see what effect it has, and increased afterwards as the result indicates it should be. It is unnecessary as an adjunct to putrescent manures, in the first instance, whose softer parts will easily decompose without it; but should it not be used as an alternate manuring to succeeding crops, to dissolve the coarse parts of vegetables, which will not easily dissolve of themselves?—*Farmers' Register*.

[* We apprehend no admixture of magnesia to be found in the soils of this country, could operate to prevent the meliorating effect of lime. Magnesia in its pure state would prove an inert agent in vegetation, and where there is any considerable vegetable substance to be acted upon, no possible injury could result from the presence of a portion of it on soil where lime is applied as a manure.—*Ed. Far. and Gard.*]

THE GARDENER.

WORK FOR JULY.

THE FARM AND KITCHEN GARDEN.

The weeds should be kept well down; and, if possible let them be carried to the dung heap and covered over with earth, so as to promote fermentation and save the volatile and gaseous parts, which would otherwise escape and be lost. Your crops of all kind should be kept clean, and those places where your early vegetables have been grown, should be prepared to receive subsequent crops.

In your gardens, continue to sow such vegetables as you wish, in succession, every ten days. Your Celery beds should be got in order, as the time is at hand for placing out the plants.

If you have any delicate vegetables which you wish to preserve from bugs or other insects, water them night and morning, for two weeks, with a solution of soap suds and sulphur. Both these ingredients are repellants to the insect tribe, and the suds will push your plants on so rapidly as soon to place them beyond the reach of their enemy. We would here desire to impress this fact upon our readers' minds—that there is not a greater fertilizer than soap suds.

If your fall cabbage or other beds, be infested with the cut worm, let some of the children about your establishment pass through them

before sun rise, stick in hand, and *kill them*.—Wherever a plant has been eaten off, let search be made under the surface, and the enemy will be found within from three to four inches of the root—treat him as we have recommended you to serve those found above ground, and you will not only save yourself from present *ravages*, but lay the ground work of future protection. A few days *zealous labour* of this kind will rid you of them.

Sow your Ruta Baga any time during the present month, the *sooner* the better. The ground should be well manured, *ploughed deep and well*, harrowed finely, then laid off into ridges about three feet apart—double furrows—the seed to be sown on the top, cover them as other turnips. A rich sandy loam suits them best—a top dressing of ashes will be found promotive of their early and vigorous growth.

Attend to the budding of your fruit trees; examine your orchards, destroy caterpillars, and if you can spare the time, wash the trunks of your trees with a solution of suds, sulphur and salts—a common hickory broom will answer for the operation. Turn your pigs into the orchard to eat the faulty fruit: you will thus get rid of the producers of myriads of insects that would otherwise annoy you next year.

If you have a vineyard, cleanse it of weeds; and if the weather should continue dry, water your vines. If you have no vines get some next fall or the ensuing spring; for no farmer or private gentleman should permit his family to remain without so delicious and cheap a luxury as grapes.

THE FLOWER GARDEN.

If you have not layered your carnations and pinks, it is time you had done so.

Directions—Provide yourself with a quantity of small pegs about three inches long and peg them down. Select the strongest and lowest shoots around the plant, trim off a few of the under leaves, and shorten the top ones evenly; apply the knife at a joint about the middle of the underside of the shoot, cut about half through in a slanting direction, on the upper side, making an upward slit towards the next joint, near an inch in extent, and loosening the earth, make a small oblong cavity, one or two inches deep, putting a little fresh light earth therein. Lay the stem part where the slit is made into the earth, keeping the cut part open and the head of the layer upright one or two inches out of the earth; peg down, and cover the inserted part one inch, pressing the earth gently down: water immediately, and in dry weather give light waterings every

evening. In two months they will be well rooted and may be separated and transplanted.—These directions will answer for any plant, shrub or tree.

Prune your garden roses; *bud* such as you desire.

Directions—Provide yourself with a proper budding knife, which has a thin blade adapted to prepare the bud, with a tapering ivory haft, made thin at the end for raising the bark of the stock. For tyings use bass strings from Russia mats, which should be soaked in water to render them pliant. Choose a smooth part of the stem, from one to three years old: prune away all the lateral shoots about and underneath it. With the knife directed horizontally, make an incision about half an inch long in the bark of the stock, cutting into the wood, but not deeper, then applying the point of the knife to the middle of the line, make a perpendicular incision under the first, extending from it between 1 and 2 inches. Having a healthy shoot of the growth of this year provided, of the kind that is desired, begin at the lower end of this shoot, cut away all the leaves, leaving the foot stalk of each. Being fixed on a promising bud, insert the knife about half an inch above the eye, slanting it downwards, and about half through the shoot, draw it out about an inch below the eye, so as to bring away the bud unimpaired with the bark, and part of the wood adhering to it: the wood now must be carefully detached from the bark. To do this, insert the point of the knife between the bark and the wood at one end, and holding the bark tenderly, strip off the woody part, which will readily part from the bark if the shoot from which the piece is taken has been properly imbued with sap. The inner rind of the separated bark must be entire. With the haft of your knife gently raise the bark on each side of the perpendicular incision, opening the lips wide enough to admit the prepared slip with the eye. If the slip is longer than the upright incision in the stock, reduce the largest end. Introduce the bud between the bark and the wood of the stock, pushing it gently downwards, until it reaches the bottom of the perpendicular incision. Let the eye of the bud project through the centre of the lips; lay the slip with the bud as smooth as possible, and press down the raised bark of the stock. The bud being deposited, bind it up with the bass, beginning a little below the incision, proceeding upward so as to keep the eye uncovered, finishing above the incision. In a month after the operation, examine whether the bud has united with the stock. If it has suc-

ceeded, the bud will be full and fresh; if not, it will be brown and contracted. When taken, untie the bandage, that the bud may swell, and in a few days afterwards cut the head of the stock off about 6 inches above the inoculation, and prevent all shoots from growing, by pinching them off.

Examine all your plants and shrubs daily, destroy the caterpillars, and if the weather be dry, use your watering pots copiously.

MARYLAND HORTICULTURAL SOCIETY.

Saturday, July 4.

The following articles were presented, viz.

By Mr. Caleb Whitmore, 4 boxes of fine Raspberries.

By Mr. Samuel Feast, two boxes of very fine Raspberries.

By Richard G. Vallentine, gardener at the late Robert Oliver's, the following Gooseberries, viz. the Monstrous, Sportsman, Boardman's British Hero, Leigh's Sceptre, Parkinson's Laurel, Grundy's Green Gage, Red Rover, Champaign, Cardinal, Sandford's Favorite, Boardman's Gage, Leigh's Toper, Brotherton's Overall. These were all of very superior quality, and considered decidedly the best exhibited this season. Mr. Vallentine also presented a fine specimen of English Black Currants, and of Red Antwerp Currants, the latter superior to any heretofore exhibited.

By Robert Sinclair, Sen. the following Gooseberries, viz: Grand Turk, Roaring Lion, Sportsman's Red, Lord Crew, Green Ocean, Bangup, Printer, and Queen Claudia.

By Mr. Samuel T. Thompson some very good Gooseberries.

At 12 o'clock, the committee of the whole awarded the weekly premium to Richard G. Vallentine, for his very fine Currants.

GIDEON B. SMITH, Cor. Sec'y.

PREMIUMS OFFERED,

BY THE HORTICULTURAL SOCIETY OF MARYLAND, FOR THE TWELVE MONTHS, From June 6, 1835, to the Spring Exhibition of 1836.

VEGETABLES.

Committee.—E. P. Thomas, J. Feast, C. E. Wethered.

For the best Cauliflowers,	\$5 00
do forced Lettuce,	3 00
do open ground Lettuce,	2 00
do Rhubarb, open ground,	3 00
do Beets,	3 00
do Cape Brocoli,	3 00
do Celery,	3 00
do Egg plants,	3 00
do Tomatoes,	3 00
do Salsify,	3 00
do Pickling Cucumbers,	3 00
do Lima Beans,	3 00
do Crooknecked Squashes,	3 00
do Early York Cabbages,	3 00
do Early Garden Potatoes, $\frac{1}{2}$ peck,	3 00
do Sea kale, 2 bunches, in March,	4 00
do Mushrooms, before middle of March,	5 00

For the best Onions, from spring sowing, 1 peck, \$3 00
do Asparagus, 4 bunches, of 26 stalks each, in open ground, an amateur premium, 10 00
And two discretionary premiums of \$3.00 each, for any rare and excellent article at the next spring exhibition, not included in the above.

FRUIT.

Committee.—*E. Kurtz, Saml. Feast, G. B. Smith.*

For the best Strawberries, \$3 00
do Raspberries, 2 quarts, 2 00
do Gooseberries, 6 kinds, 4 00
do Cherries, 4 kinds, 3 00
do Grapes, 4 kinds, 2 bunches each, 5 00
do Plums, 4 kinds, 6 each, 3 00
do Apples, before 2d Saturday in July, 4 kinds, half peck each, 3 00
do Late Apples, after 1st February, 4 kinds, 12 of each, 5 00
do Early Peaches, by 2d Saturday in August, 4 kinds, 12 of each, 5 00
do Late Peaches, after the 2d Saturday in September, 4 kinds, 12 each, 5 00
do Apricots, 3 kinds, 6 each, 3 00
do Figs, 2 kinds, 12 each, 2 00
do Quinces, 2 kinds, half peck each, 2 00
do Nectarines, 2 kinds, 6 each, 4 00
do Cantaloupes, 5, 3 00
do Winter Cantaloupes, 2, 3 00
do Pears, half peck, Amateur premium, 10 00
And two discretionary premiums of \$3.00 each, for any rare and excellent fruit, not enumerated in the above.

ORNAMENTAL DEPARTMENT.

Committee.—*Thomas Edmondson, J. P. Kraft, W. G. Thomas.*

For the best collection of Camelia Japonicas, including the greatest number of kinds, and finest bloom, \$10 00
do Seedling Camelia Japonicas, remarkably fine, 10 00
do Collection of Dahlias, 5 00
do Seedling Dahlias, remarkably fine, 5 00
do Azaleas, greatest number of kinds, and finest bloom, 5 00
do Amaryllises, kinds and bloom, 3 00
do Collection of Pelargoniums, 3 00
do Seedling do. remarkably fine, 3 00
do Seedling double Yellow Rose, 5 00
do China Roses, in open ground, 2 00
do Chrysanthemums, 2 00
do Carnations, including Seedlings, 2 00
do Tulips, 2 00
do Hyacinths, 2 00
do Primuli Polyanthus, 2 00
do Collection of Succulents in bloom, 5 00
do do. Herbaceous plants, 3 00
For the finest and rarest exotic, an Amateur premium, 10 00
And two discretionary premiums of \$5.00 each, for the best articles in the ornamental department, at the next spring exhibition, not included in the above.

In addition to the above, the society will award a premium every Saturday, at 12 o'clock, M. for the most meritorious article exhibited on

that day, at the room, Patapsco building, corner of Fayette and North streets.

It is to be understood, that any article, to obtain a premium, must be excellent in quality, rarity, or earliness of season. Also, that all vegetables, and fruits, must be the produce of the person in whose name they are offered for premium, or they will not be allowed to enter into competition. Articles that receive premiums at the weekly exhibitions, cannot receive them at the annual exhibitions. Gardeners, and others, presenting articles at the room for premiums, should attach their names to them, and state whether they are intended for the 'annual' or 'weekly' premiums.

The Horticultural Society earnestly request the attention of Gardeners and the public at large, to the exhibitions of Vegetables, Fruit and Ornamental plants, EVERY SATURDAY FORE-NOON, at the Society's Room, Patapsco building, corner of Fayette and North streets, where the committee attend to inspect articles that may be presented; Vegetables, Fruit, and Ornamental plants, may also be presented, at the meetings of the Council and of the Society, on the evenings of the FIRST and LAST SATURDAY of every month, as well as at all extra meetings.

Regular records of every article exhibited will be kept, and at the exhibition, next spring, the premiums will be awarded to the most deserving, according to the above list. By order,

GIDEON B. SMITH, Corr'g Sec'y.

[From the National Intelligencer.]

We have the mournful duty of announcing that the venerable and venerated CHIEF JUSTICE OF THE UNITED STATES, JOHN MARSHALL, is no more! He expired at his lodgings in Philadelphia (whither he had gone a few weeks before for surgical aid) on Monday afternoon, the 6th inst., in the 80th year of his age.

In noticing the decease of this illustrious citizen, who has filled for more than a third of a century, with universal confidence and admiration, the most dignified and delicate, if not the most important, trust that could have been confided to him by his country, and who has lived for more than half a century in the unvarying affections of his countrymen, the language of eulogy from our pens would be as vain as unnecessary. His long life has been one uniform history of public service, and private virtue. And he has now descended to the tomb crowned with a larger share of public esteem and public regret, than any citizen since the departure of WASHINGTON, if indeed we may except even the Father of his Country himself.

It is not for us to attempt his character or his history. This is a task for different and abler hands, and it will in due time, we doubt not, be performed in a fitting manner. In the meantime for the information of those who may not be familiar with the incidents of the earlier history of the lamented patriarch, we copy the following summary from a Baltimore cotemporary,* which we believe to be substantially accurate:

John Marshall was born in Fauquier County, Virginia, on the 24th of September, 1755, the

eldest child of Col. Thomas Marshall, a planter of small fortune, who had fifteen children. From his intelligent father the future Chief Justice of the United States received the first rudiments of education. By him he was introduced into the study of history and poetry. From his father's tuition he passed, between his fourteenth and eighteenth years, successively through the hands of several teachers, one of whom carried him as far as Horace and Livy, in the Latin Classics. Upon this foundation he afterwards made himself a good Latin scholar.

In his eighteenth year, while studying law, he engaged enthusiastically in the growing controversy between Great Britain and her American Colonies, devoting much time to military exercise in a volunteer corps, to training a military company in the neighborhood, and to reading the political essays of the day.

In the summer of 1775, being in his twentieth year, he was appointed first lieutenant of a company of minute men enrolled for actual service, and was soon afterwards engaged with this company in the battle of the Great Bridge, where the British troops, under Lord Dunmore, were repulsed with great gallantry. In July, 1776, he was transferred as first lieutenant to the eleventh Virginia regiment on the Continental establishment. The following winter he marched to the North, and in 1777 was promoted to the rank of captain. He was in the battles of Brandywine, Germantown, and Monmouth. In 1780 he returned home and resumed the study of law, while waiting for orders from the State Legislature. In the autumn of the same year he obtained a license to practice, and rejoined the army, in which he continued till 1781, when, there being a redundancy of officers in the Virginia line, he resigned his commission.

He was distinguished in service for courage and activity, and such was the estimation in which he was held by his brother officers, that quarrels and points of difference among them were often submitted to his arbitration. Thus early was he noted for that union of sound judgment and integrity which has since given to his decisions a value and weight, unsurpassed by those of any other judicial tribunal in the world.

He soon rose to eminence at the bar. In the spring of 1782 he was elected a member of the State Legislature, and in the autumn of the same year a member of the Executive Council. The following January he married Miss Ambler. In 1784 he resigned his seat in the council in order to return to the bar; and he was immediately afterwards re-elected to the Legislature from Fauquier county. In 1787 he was elected a member for the county of Henrico, of which Richmond is the shire town. He engaged warmly in the animated discussions of that excited period, and was afterwards a member of the convention called in Virginia to ratify the Constitution. In 1788, the Legislature having passed an act allowing a representative to the city of Richmond, he was invited to become a candidate, and was elected. He continued in the Legislature till 1791, when he retired, mingling, however, actively in the politics of the day.

One of the earliest meetings called to express public sentiment, as to the conduct of Citizen Genet, was at Richmond, and Mr. Marshall drew

* The American.

up the resolutions there passed, expressing strong disapprobation of Genet's course, and a deep sense of the danger of foreign influence. In 1795 he was again elected to the Legislature.

About this period he was invited by President Washington to accept the office of Attorney General; but declined on account of its interfering with his lucrative practice. Upon the recall of Mr. Monroe, as Minister from France, President Washington solicited him to accept the appointment as Mr. Monroe's successor.—This offer he likewise declined. A year afterwards he was appointed by President Adams one of the three Commissioners to be sent to France in place of one minister. The crisis was alarming, and from a sense of public duty he reluctantly accepted the appointment. He returned in 1798.

In 1799, at the earnest solicitation of General Washington, who invited him to Mount Vernon for the purpose of discussing the subject, he became a candidate for Congress and was elected. The distinguished part he played in the memorable session of 1799-1800 is well known. In 1800, without the slightest personal communication, he was nominated by the President Secretary of War, and immediately afterwards Secretary of State. Chief Justice Ellsworth dying about this time, Mr. Marshall was made, on the 31st January, 1801, Chief Justice of the United States, which post—one of the most elevated and important known in the history of governments,—he has occupied for thirty-four years, discharging its arduous and responsible functions with the highest credit to himself and the greatest benefit to his country. He had reached his eightieth summer, and biography can furnish the lives of few men, if any, who have had a longer, loftier, and purer career.

Funeral Honors to the late Chief Justice Marshall.—The citizens of Philadelphia assembled in town-meeting on Tuesday evening, to express their sentiments on the occasion of the death of the late Chief Justice Marshall, at which the Rt. Rev. Bishop White presided; the Hon. B. R. Morgan and T. M. Pettit, acting as Vice Presidents; and Nicholas Biddle, Esq. and the Hon. Edward King, Secretaries.

J. R. Ingersoll, Esq. offered the following preamble and resolution, which were seconded by G. M. Dallas, Esq. and unanimously adopted:

The deaths of great and good men are calculated to excite the attention and impress the hearts of those who survive; and to inspire them with an earnest desire to emulate their virtues and imitate their actions. In the decease of John Marshall, the nation suffers a peculiar and irreparable loss. Seldom has an event occurred, better calculated to impress his countrymen with feelings of awe. Seldom has an individual died more universally or more justly admired, esteemed, cherished or deplored.

Resolved, That the citizens of Philadelphia entertain a deep sense of the public services and private worth which have distinguished the long life of John Marshall, late Chief Justice of the United States.

That as he has died in the midst of this community, it feels itself especially called upon to express its sentiments of respect for his memory, and as the citizens of Philadelphia would have

rejoiced to greet him in life with every mark of hospitality, they will extend to his honored remains the testimony of their unfeigned veneration.

That they will form a funeral procession to move from the late lodgings of the deceased to the place of embarkation of his body.

A meeting of the Bar of Philadelphia was also held, Mr. P. S. Duponceau presiding, at which the following resolutions were offered by Mr. Sergeant, and unanimously adopted:—

Resolved, That the Bar of the city of Philadelphia participate in the grief which has been caused by the death of the late Chief Justice of the United States, John Marshall, and desire to unite with their fellow-citizens in expressing their deep felt respect for the memory of that illustrious man.

Resolved, That while in common with our fellow-citizens, we mourn the great public loss which has been sustained, we feel it to be our privilege as members of a profession so highly honored by the character, talents and services of the deceased, and so long enlightened and directed upon the most momentous topics by his profound and patriotic mind, to be permitted in a special manner to acknowledge our obligations, and express our reverence for the name of John Marshall—Therefore,

Resolved, That it be recommended to the bar of the United States, to co-operate in erecting a monument to his memory, at some suitable place in the city of Washington.

Resolved, That Messrs. Rawle, Duponceau, Sergeant, Binney, Chauncey, C. J. Ingersoll, P. A. Browne, Peters, J. S. Smith, J. R. Ingersoll, Wm. Smith, Purdon, Randall, W. Rawle, jr., Dallas, H. J. Williams, Kane, J. M. Read, Dunlap, D. P. Brown, Norris, W. M. Meredith, Jas. C. Biddle, Chester, Gilpin, Cadwalader, C. Ingersoll, W. T. Smith, W. B. Reed, McCall, be a committee on the part of the Bar of Philadelphia, to unite with their brethren in other parts of the State and Union, in carrying the above resolution into effect.

Resolved, That the Bar of Philadelphia will wear crape on the left arm for thirty days, and, if consistent with the arrangements of the near friends of the deceased, will in a body accompany his remains to the place of embarkation for his native State.

Resolved, That Judge Baldwin, Mr. Peters, Mr. Sergeant, Mr. Wm. Rawle, Jr., Mr. T. J. Wharton, and Mr. E. D. Ingraham, be requested, on the part of the bar, to accompany the remains of Chief Justice Marshall to the city of Richmond, and to attend the funeral there.

Mr. C. J. Ingersoll then offered the following resolutions, which were also unanimously adopted.

Mr. Wharton and Mr. Peters moved that Mr. Sargeant be requested to deliver an eulogium on the character of the late Chief Justice Marshall, before this Bar, at some future time, to be designated by himself.

The city councils of Philadelphia also passed the following resolution:—

Resolved, That the Councils of the City of Philadelphia partake in the common grief of their fellow-citizens, for the loss which our country has sustained by the death of the late illustrious JOHN MARSHALL, Chief Justice of the United States.

Resolved, That the officers and members of the Select and Common Councils will attend the remains of the lamented deceased, beyond the borders of Pennsylvania, and the Mayor, Recorder, Aldermen and citizens, be invited to assist in paying this tribute of respect to his distinguished character and services.

At a meeting of the Judges and Members of the Bar of the Federal and State Courts of this city (Baltimore) assembled at the Court Room in the Masonic Hall, on motion of Nathaniel Williams, District Attorney of the United States, Elias Glenn, Judge of the District Court, was appointed Chairman, John Purviance, a Judge of the Sixth Judicial District of Maryland, Assistant Chairman, and U. S. Heath, Secretary.

Whereupon the following resolutions, offered by David Hoffman, who preceded them by an appropriate and impressive address, were unanimously adopted:—

Resolved, That the Judges and Members of the Bar here assembled, feel with the deepest sensibility, the great national bereavement sustained in the death of John Marshall, Chief Justice of the United States.

Resolved, That the eminent probity, the great professional learning, the clear judicial mind, and the dignified and courteous manner, which in a remarkable degree characterized the deceased during a period of nearly thirty-five years since his appointment to the highest judicial station of the country, render him an illustrious example of emulation to present and future ages.

Resolved, That to testify our profound respect for his exalted patriotism, private worth and judicial excellence, we will wear the usual badge of mourning for two months.

Resolved, That as a further testimonial of our sincere veneration for his memory, a faithful likeness of him be procured, to be executed by one of our most eminent Artists, and that David Hoffman, Nathaniel Williams and Upton S. Heath, be a committee authorized to obtain such likeness.

Resolved, That this meeting fully concur in the Resolution of the Philadelphia Bar in respect to the erection of a monument to the memory of CHIEF JUSTICE MARSHALL—and will co-operate therein.

The remains of the venerable Chief Justice Marshall, were brought to this city on Wednesday last, from Philadelphia, in the rail road line, and left here in the Norfolk steamboat, to be conveyed to Richmond on the following morning.

CONTENTS OF THIS NUMBER.

Note to "A Subscriber"—Notice of Judge Marshall's death—Notice of a letter from a correspondent of Lancaster county, Pa.—Notice of a communication on the cut worm—do. on one on Potato cuttings—Reference to Mr. Sinclair's communication on grazing, soiling, &c.—The crops and root culture—Carrots an improver of Butter—Salt and Lime destructive to certain insects—the endless chain horse power, and thrashing machine—Blacker on the waste of manure—important experiment on potato culture—letter relative to the crops of Lancaster county, Pa., and the efficacy of lime as a manure—Mr. Sinclair on grazing, soiling, and the grasses adapted to each—remedy for the cut worm—virtue of the crimson clover—Plaster, ashes and lime, and their beneficial effects—work for July—Md. Horticultural Society's proceedings—premiums of do.—death of Chief Justice Marshall, funeral honors to, &c.—prices current, and bank note table—advertisements.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,.....	bushel.	2 50	
CATTLE, on the hoof,.....	100lbs.	6 00	7 00
Slaughtered,.....	"		
CORN, yellow,.....	bushel.	93	95
White,.....	"	95	98
COTTON, Virginia,.....	pound.	17 1/2	18
North Carolina,.....	"		
Upland,.....	"	18 1/2	20
FEATHERS,.....	pound.	37	40
FLAXSEED,.....	bushel.	1 25	1 37 1/2
FLOUR & MEAL—Best wh. wh't fam	barrel.	8 00	8 50
Do. do. baker's,.....	"	7 50	8 00
Do. do. Superfine,.....	"	6 75	7 25
Super Howard street,.....	"	6 75	7 00
" wagon price,.....	"	6 50	6 75
City Mills, extra,.....	"		
Do.	"	7 00	
Susquehannah,.....	"	Sales	6 75
Rye,.....	"	5 00	5 25
Kiln-dried Meal, in hhd.	hhd.	20 00	
do. in bbls.	bbl.	4 37	4 50
GRASS SEEDS, red Clover,.....	bushel.	5 00	5 25
Timothy (herds of the north) ..	"	2 50	3 00
Orchard,.....	"	none	
Tall meadow Oat,.....	"	2 00	2 50
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.	18 00	20 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	8
Hogs, on the hoof,.....	100lb.		
Slaughtered,.....	"		
Hops—first sort,.....	pound.	12	
second,.....	"	10	
refuse,.....	"	8	
LIME,.....	bushel.	33	35
MUSTARD SEED, Domestic,.....	"	5 00	6 00
OATS,.....	"	50	53
PEAS, red eye,.....	bushel.		
Black eye,.....	"		1 25
Lady,.....	"		
PLASTER PARIS, in the stone,.....	ton.		3 12
Ground,.....	barrel.	1 37	
PALMA CHRISTA BEAN,.....	bushel.	2 00	
RAGS,.....	pound.	3	4
RYE,.....	bushel.	92	93
Susquehannah,.....	"	93	95
TOBACCO, crop, common,.....	100 lbs	4 00	5 00
" brown and red,.....	"	5 00	7 00
" fine red,.....	"	7 00	9 00
" wrappery, suitable	"		
for segars,.....	"	6 00	12 00
" yellow and red,...	"	8 00	12 00
" yellow,.....	"	9 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"	4 00	5 00
" ground leaf, ..	"	5 00	9 00
Virginia,.....	"	5 00	10 00
Rappahannock,.....	"		
Kentucky,.....	"	6 00	9 00
WHEAT, white,.....	bushel.	1 50	1 55
Red, Susquehannah,.....	"	1 48	1 50
WHISKEY, 1st pf. in bbls.	gallon.	37	37 1/2
" in hhd.	"	36 1/2	37
" wagon price,.....	"	33	33 1/2
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 12	
To Wheeling,.....	"	1 25	
Wool, Prime & Saxon Fleeces, ...	pound.	62 to 75	26 to 28
Full Merino,.....	"	52	62 24 26
Three fourths Merino,.....	"	45	52 23 24
One half do.	"	40	45 23 24
Common & one fourth Meri.	"	35	40 22 24
Pulled,.....	"	38	40 23 26

FOR SALE,

A TWO years old three-fourths Devon BULL. He is of fine form and medium size—he has been fed as dry cattle usually are. Having no use for him, his price will be very low—only \$25.
June 9th.

SINCLAIR & MOORE.

BALTIMORE PROVISION MARKET.

	PER.	FROM	TO
APPLES,.....	barrel.		
BACON, hams, new, Balt. cured...	pound.	11	11 1/2
Shoulders,.... do.	"	10	10 1/2
Middlings,.... do.	"	10	10 1/2
Assorted, country,.....	"	9	9 1/2
BUTTER, printed, in lbs. & half lbs.	"	18 1/2	25
Roll,.....	"		
CIDER,.....	barrel.		
CALVES, three to six weeks old...	each.	3 00	6 00
Cows, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	2 00	2 10
CHOP RYE,.....	"	2 00	
EGGS,.....	dozen.		
FISH, Shad, No. 1, t'd 7 75; untr'd	barrel.	7 25	
Herrings, salted, No. 1,.....	"	4 37 1/2	4 50
Mackerel, No. 3,.....	"		4 87
Cod, salted,.....	cwt.	2 25	2 75
LARD,.....	pound.	10	10 1/2
ONIONS,.....	bushel.		
POULTRY, Fowls,.....	dozen.		
Ducks,.....	"		
POTATOES, Irish,.....	bushel.	62 1/2	87 1/2
Sweet,.....	"		
TURNIPS,.....	"		

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	VIRGINIA.
U. S. Bank,.....par	Farmers Bank of Virginia, &a
Branch at Baltimore,....do	Bank of Virginia,.....do
Other Branches,.....do	Branch at Fredericksburg do
MARYLAND.	Petersburg,.....do
Banks in Baltimore,....par	Norfolk,.....do
Hagerstown,....do	Winchester,.....do
Frederick,.....do	Lynchburg,.....do
Westminster,.....do	Danville,.....do
Farmers' Bank of Mary'd, do	Bank of the Valley,....do
Do. payable at Easton,....do	Branch at Romney,....do
Salisbury,.... 5 per ct. dis.	Do. Charlestown,....do
Cumberland,.....do	Do. Leesburg,....do
Millington,.....do	Wheeling Banks,.....do
DISTRICT.	Ohio Banks, generally 3a3 1/2
Washington,.....do	New Jersey Banks gen. 1 1/2a2
Georgetown, } Banks, 1/2.	New York City,.....3a
Alexandria,.....do	New York State,....2 1/2a3
PENNSYLVANIA.	Massachusetts,.....2a2 1/2
Philadelphia,.....1a	Connecticut,.....2a2 1/2
Chambersburg,.....3a	New Hampshire,....2a2 1/2
Gettysburg,.....do	Maine,.....2a2 1/2
Pittsburg,.....1a2	Rhode Island,.....2a2 1/2
York,.....1a	North Carolina,....3a4
Other Pennsylvania Bks. 1 1/2a2	South Carolina,....2 1/2a3
Delaware [under \$5]....3a4	Georgia,.....4 1/2a5
Do. [over \$5].....1a1	New Orleans,.....do
Michigan Banks,.....5a	
Canadian do.....5a	

VALUABLE STOCK FOR SALE.

A FULL-BRED Durham short horn yearling BULL, a very superior animal; a 7-8 blood, same age; also two COWS, 4 years old, 3-4 blood, in calf by a full-bred Bull. Pedigrees given in full. Applications for any of the above cattle to be made to the Editor of the Farmer and Gardener, by whom the terms will be made known. Letters from a distance must be post paid.
June 30th.

DEVON COW AND CALF.

FOR sale, a first rate DEVON COW, five years old this spring, of the best blood and most beautiful form. She is altogether one of the most perfect animals of her kind, and is in Calf to a first rate Devon Bull. She has also by her side a BULL CALF, two months old, equal in all respects to any other calf of his kind, and age. The price of the two animals is \$200, and they will be delivered in Baltimore. Address
I. I. HITCHCOCK, Philadelphia.
June 9th, 1835.

LARGE WHITE FLAT TURNIP SEED, &c.

JUST RECEIVED,

550 LBS. large White Flat, and Red Top TURNIP SEED, (growth 1834,) raised at the Clairmont Nurseries, by R. Sinclair, Senr. from the finest and best shaped roots. The perfect success of Turnip crops produced from these seeds for the last 8 years, and the general satisfaction expressed by those who have tried them, added to the increased annual demand for the articles from Eastern Seedsmen and others, is sufficient proof of its superior quality.

It is recommended "to sow the seed of either kind about the 10th August, on new cleared land, or well tilled clay or loam—quantity of seed required to crop one acre of ground 1/2 to 1 lb.; if the latter quantity is sown it will be necessary to cross the plants with a harrow, after which follow with hoes, leaving the plants about 12 inches apart." For further information relative to preparation of seed, cultivation, &c. see R. Sinclair's remarks on Turnip crops in the American Farmer, volume 8, page 138. Price \$1 per lb. and a liberal discount to those who purchase to sell again.

Also, early round Dutch Turnip Seed, Norfolk or large white, white Tankard, yellow Bullock, Ruta Baga, and Dale's new Hybrid Turnip Seeds, at 75 cts. to \$2 per lb.

PICKLING CUCUMBER SEED of best sorts, Endive, Brussels Sprouts. Lettuce of various sorts, among which are brown Dutch; large white Cabbage and Cilicia—the three most esteemed sorts; YELLOW TURNIP RADISH, and BLUE CURLED GREENS, or DELAWARE KALE, a superior sort of fall sowing—both of the latter articles were raised by Robert Sinclair, Senr., with his usual care, from plants selected expressly for the purpose.
R. SINCLAIR, Jr.

At Sinclair & Moore's Maryland Agricultural Repository.
June 30

DALE'S NEW HYBRED TURNIP.

THE subscriber now offers to the agriculturists a new and decidedly superior variety of Turnip, originated by R. Dale, Esq. an intelligent farmer, near Edinburgh, Scotland; it was obtained by unwearied attention in crossing the Swedish or Ruta Baga Turnip; it is superior in size and flavor to the Ruta Baga; is closer and finer in texture; it is as rapid in its growth as the white Flat Turnip. In fact, it includes the great desideratum in the selection of a proper variety of the Turnip which is to obtain the greatest possible weight at a given expense of manure. This Variety seems to be more adapted to this end than any other sort introduced; it will be found superior in quality to any of the White Field Turnips, and keeps longer than any of them, and very near as long as the Ruta Baga—the color is yellow—the shape oblong. Price 25 cents per ounce. The season for sowing is at hand.
R. SINCLAIR, Jr.

At Sinclair & Moore's Maryland Agricultural Repository.
June 30th.

TERMS OF THIS PAPER.

1. Price five dollars per annum, payable in advance. When this is done, 50 cents worth of any kind of seeds on hand will be delivered or sent to the order of the subscriber with his receipt.

2. The manner of payment which is preferable to any other for distant subscribers, is by check or draft on some responsible party here, or else by remittance of a current bank note; and to obviate all objection to mail transmission, the conductors assume the risk.

3. Subscriptions are always charged BY THE YEAR, and never for a shorter term. When once sent to a subscriber the paper will not be discontinued (except at the discretion of the publishers) without a special order, on receipt of which, a discontinuance will be entered, to take effect at the END of the current year of subscription.

4. Subscribers may receive the work by mail either in weekly numbers, or in monthly or quarterly portions; or else in a volume (ending in May annually), handsomely pressed, half bound and lettered (to match with the American Farmer) by such conveyance as they may direct: but the \$5 must in all these cases be paid in advance.

Advertisements relating to any of the subjects of this paper will be inserted once at one dollar per square, or at that rate for more than a square, and at half that rate for each repetition.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 12.

BALTIMORE, MD. JULY 21, 1835.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, JULY 21, 1835.

THE HARVEST.—Judging from the various notices we have seen of the crops of wheat, throughout the country, within the last four or five days, we are gratified in being able to believe, that although an average crop may not have been made, that an infinitely better one has been secured than was anticipated. The crops of *hay*, have been generally *heavy*, and having been cured under the auspices of pleasant skies, will therefore, be fragrant, palatable and nutritious to those domestic animals whose good service so commend them to our kindest protection.

We respectfully beg leave to call the attention of our readers to the drawings in the present number of the Farmer and Gardener, of the buildings and out-houses necessary on the homestead of an opulent country gentleman, as also to the explanations and remarks, illustrative of the uses and conveniences of the several buildings. They are by the senior proprietor of this work.

COOKING BY GAS.—Yesterday our citizens at the Arcade were treated by Mr. Caldwell with a leg of mutton cooked on the spot by means of gas. The following is an account of the method and apparatus used:

A burner of about 15 inches diameter is connected with a spit which rests in a tin dripping pan, the mutton being put on the spit, shank downward, and the gas burner lighted which being circular, the heat of course applied itself equally on the meat; a tin cover of about the size of a Dutch oven was then put over it, and meat can be cooked at the rate of about a pound in ten minutes. The advantage of this mode of cooking is, 1st, the cleanliness and safety; 2d, the saving of labor and economy, 3d, the superior flavor of the meat, the juices being preserved in it until it is entirely cooked.—*N. Orleans American.*

The canal from Columbia to the Chesapeake is fairly organized and we trust on the onward march to a speedy completion. When finished it will be amongst the most important and national works in the country.

THE ELM—THE MOLE.

Mr. Editor—The continued devastations of the insect which preys on the leaves of the elm tree induces me to inquire of you, or through the medium of your useful paper, whether any remedy against their ravages has yet been discovered. It is much to be feared that all the trees of this class will have to be removed if no mitigation of the evil complained of is discovered; some trees in the city have already been cut down. It has been said, that in Philadelphia after these insects had attacked the elms three successive seasons they disappeared, whether this is true or not I am unable to say.

While on the subject of vermin I would also respectfully inquire the best method of extirpating moles from the garden, as they are very numerous this season.

Any information on the above subjects will oblige
A SUBSCRIBER.

June 25th, 1835.

Remarks by the Editor.

OF THE ELM.

In common with many others, the editor has witnessed the ravages of those insects which have preyed upon the Elm for the last few years, and has seen with feelings of unaffected pain, the inefficacy of the various means recommended, and tried to destroy them. But he is disposed to think that one great cause of non-success has arisen from the want of *perseverance* in the application of the several remedies.

While some have prescribed the application of a *tarred cloth* around the trunk of the tree, others have recommended the tree to be encircled with a gutter of *lead* or *tin*, to be filled with tar, to prevent the worm, which generates the insect, from ascending the tree and depositing its eggs. Another description of remedies have been strongly recommended in a liquid form. *Solutions* of soap suds and sulphur—of *tobacco* and *glauber salts*—of *tobacco*, common salt, and lime water, have each, been warmly commended to public confidence, to be thrown on the trees with a hand or garden engine.

In our opinion, the best plan would be to combine both forms of these prescriptions—the application of the tar either on canvass or in gutters, and the cleansing of the leaves by means of a pump, at least two or three times a week, early in the spring, and of a morning while the dew is on the leaves. This drenching plan to be *continued* for three or four weeks. The mistake we

fear has been in too early abandoning the remedy resorted to. To contend successfully against *such an enemy*, will require long continued perseverance, and who that can afford it, would begrudge the time and expense of a servant for an hour of a morning, if so beautiful a tree as the Elm, can be saved, to throw its acceptable shade on his side-walks.

It has been confidently stated as our correspondent suggests, that after these insects had attacked the elms three successive seasons in Philadelphia, they disappeared. This is our *third year*, we believe; and if there be any reality in the exemption mentioned in Philadelphia, we should be happy to see the fact stated by some of the public journals of that city, as it will be a consolation to know that there is at least a prospect of relief ahead.

Of the liquid applications, we should prefer the soap suds and sulphur.

Other remedies are highly spoken of—one is to bore a hole in the body of the tree and fill it with mercurial ointment and cork it up tightly—another, to bore a hole *slanting downwards*, and fill it up with spirits of turpentine and cork tightly.

These latter remedies are the most simple, and as their efficacy could soon be tested, they are certainly worthy of a trial. They could do no harm if they did no good.

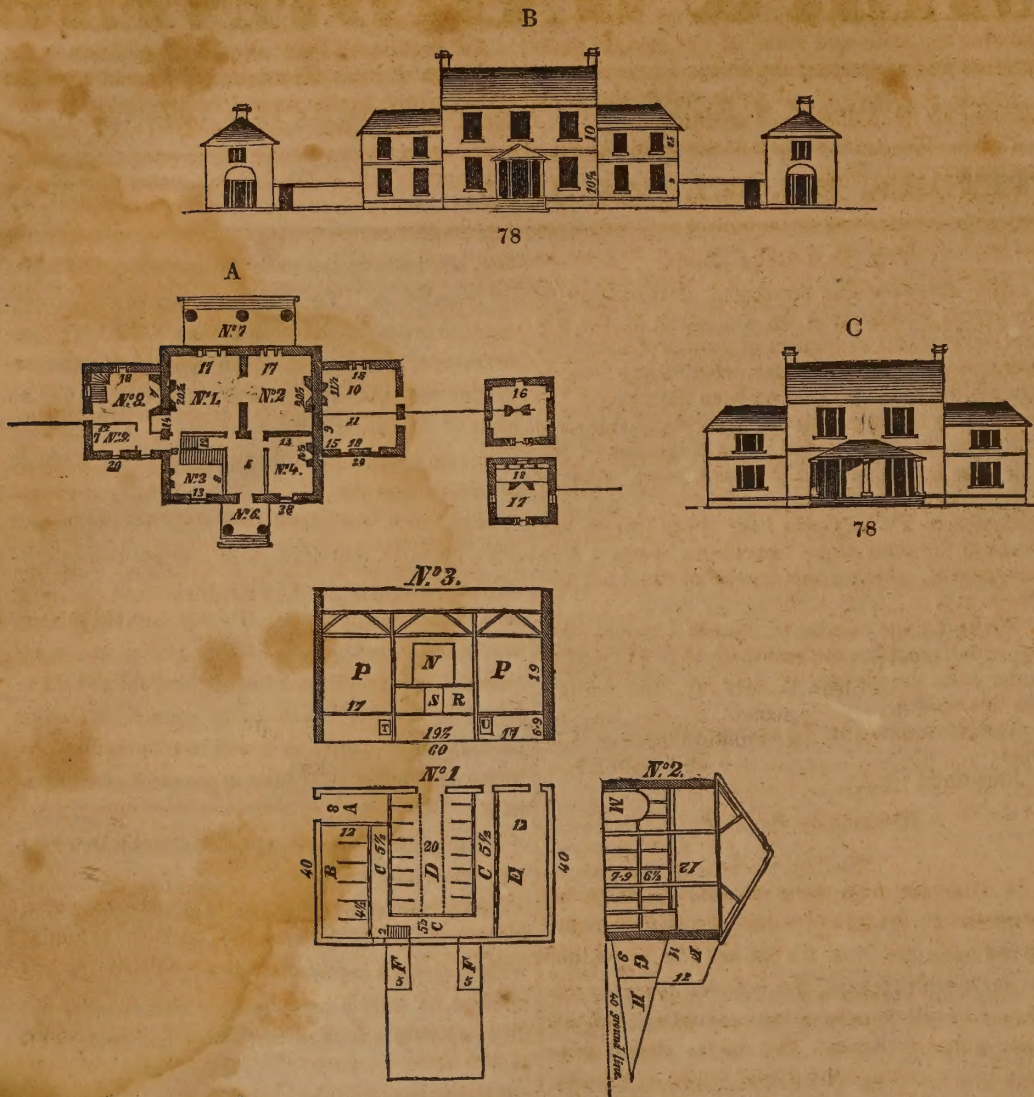
Now if there be any virtue in the sulphur—if its smell is so noxious as to cause the insect to leave the infested tree or shrub, would it not be efficacious to put a small portion of it around the root of the elm trees, early in the spring, so mixed with the earth, as to prevent its escape.

We recollect another prescription—it is to tie a bag of blubber oil and salt around the tree, and to pour a kettle of boiling brine around the roots of the tree.

OF THE MOLE.

A few plants of the *Palma Christi*, interspersed through a garden, will cause this animal to leave the premises.

A noble Cheese.—The editor of the Buffalo, N. Y. Journal, describes a Cheese which was to be seen (perhaps nibbled) in that city, manufactured by Clark, Dart, and David Camp, of Hamburg, and weighing *three hundred pounds*—being *eight feet and three inches in circumference*!



TO THE PATRONS OF THE FARMER AND GARDENER.

Having in early life learned drawing and architecture, and being for several years engaged in the construction of buildings, I have derived great advantages, subsequently, from the information thus acquired, in the erection of even the roughest building on my farm, enabling me as it did in its plan and arrangement, to consult economy and convenience, and to adapt it to the peculiar purposes for which it was required, with the least possible expense, matters which, with a judicious agriculturist, should never be lost sight of. Indeed, according to my views, these are the chief objects to be consulted in the whole internal economy and management of a landed estate, whether regard be had to its cultivation, or to the improvements thereon. In saying this in favor of what may be considered the *useful*, I wish it not to be thought that I would reject, or that I am not a lover of, appropriate architectural decorations and ornaments; for of these I am a warm and decided

admirer, and especially so where the means are ample, and can be spared from such things as are essential to comfort.

From the benefit and satisfaction I have derived from a knowledge of architecture and drawing, I have been induced to believe that it would not be unacceptable to our numerous subscribers, to present them with a few drawings of *plans of dwellings, and the necessary out-houses* suited to the purposes of farmers of various grades. And I shall do this in the hope that, in some instances at least, those of our readers who may be about to build on their farms, may gather some instructive ideas from the drafts and explanations which I shall from time to time lay before them. I am far from believing that I shall be so fortunate as to please all; but I am confident, that each may find something which will aid him in arriving at a proper conclusion as to the plan of such a house as will be best adapted to his wants, locations, and purse, so as to enable him to accomplish his

object in the cheapest way consistently with durability, taste and usefulness.

With this view I shall commence my labors by submitting the following plan, and section of a spacious dwelling, commodious enough to accommodate a large and opulent family, with comfort and convenience; which will be found to combine no small degree of elegance when considered in relation to its cost.

The approach to this building is intended to be either from the east, west, or northerly, and to terminate at the north door; to be protected from the northern blast by tall oak, hickory, or such other trees as may be native there, thinly scattered over the ground, which may be set in grass; and these to be interspersed with groups of *balsam, fir*, or other evergreens, tastefully arranged for effect. Should such protection not be practicable, a well cultivated orchard of fruit trees will answer in their stead; but the latter, as well as a good vegetable garden, would, probably, except in the case described, answer best, if placed eastwardly of the mansion, and the farm buildings, such as barn, stabling, &c., to the westward, or reversed as might be required by the site, leaving the south front an *open lawn*, unincumbered with trees, except here and there, at a distance, single ornamental trees, with a few clumps, of evergreens, and on the right and left small groves of ornamental trees and shrubs, so arranged as to make the lawn in front widen as these groves extend from the mansion.

EXPLANATIONS OF THE DRAWINGS.

Of the Mansion.

A. Plan of the first story.

B. Elevation of the north front, with study and managers house to the right and left.

C. The south front.

No. 1, common parlor: No. 2, drawing room: No. 3, housekeeper's or dressing room: No. 4, breakfast room: No. 5, entrance hall: No. 6, north portico: No. 7, south portico: No. 8, kitchen: No. 9, pantry: No. 10 & 11, office and store room or working shop, &c.: No. 12, passage from hall to kitchen, under the upper flight of stair steps, (this might if necessary be converted into a pantry or closet for china:) No. 13, passage from common parlor to dressing room.

The second story to be divided as below with the addition of one room over the hall. The *garret* will make 4 good rooms, by having two windows in each gable end, and two dormant windows on each front.

By the arrangement of the rooms on the first floor it will be perceived, that, from the common parlor, with three steps the mistress of the family can be at the cellar door, which is situated under the first flight of stairs, or at the dressing room door, as occasion may require, and that with five steps she can reach the kitchen fire, a most important place, by the bye, for her to keep a vigilant eye over, if she be desirous of having her cul-

linary affairs judiciously managed or her cooking well and economically done.

It will be observed that the kitchen fire place is in the rear of, and immediately adjoining, the back of the common parlor fire place. With some, this location of the kitchen fire place may be viewed as an objection, and as rendering the appearance of the building not as attractive as it would be if the chimneys were at the extreme outer end of the kitchen, and with such I am ready to join in opinion. But if they only desire to relieve the general aspect of the building from what might be viewed in the light of an architectural deformity, their object can be attained by a very simple process, and one too, of but inconsiderable expense—by merely carrying up chimneys from the study and servant's rooms. Should this latter suggestion not be adopted, it will readily be conceded that the apparent defect in the beauty of the house is more than balanced by the superior utility, and increased comfort arising from the location of the kitchen fire place, as before premised. If the flue or funnel of the kitchen fire place be carried up in the same stack of chimneys, as those of the mansion house, being of the same height, it will be less liable to smoke than if under the influence of the eddy which would be formed were it carried up independently of, and of less elevation than, those of the main building, as they necessarily must be, if projected from the outer end of the kitchen. There are two other advantages to be gained by building the fire place adjoining the parlor: first, it will contribute largely towards warming it, and secondly, it will be more convenient for the superintendence of the mistress of the family, and yet the sitting parlor may be rendered entirely private, when necessary, by closing the door.

Having thus explained the drawings of the Mansion house and its appendages, I shall now proceed to describe the necessary farm buildings for such an estate, and particularly if a large quantity of hay be raised and much stock be kept.

No. 1. Ground plan.

A. Carriage house.

B. Family horse stable.

C.C.C. Feeding passages.

D. Cow stables with door to back the cart in for the purpose of hauling out manure.

E. Stable for work horses.

F.F. Two lathed corn cribs.

G. A vacant space under the bridge leading into the barn, and between the barn and bridge abutment, which admits of a door into the granary between the stables and barn floor.

H. A walled embankment or bridge-way into the barn.

F.F. A covered enclosed way into the barn under which is two corn cribs, between which the cart passes into the barn.

M. A carriage-house door.

N. Barn door.

P.P. Hay Mows.

R. A granary story divided into garner.

S. A door leading into the granary story.

T. A door to the feed passages.

U. A window with wide moveable slats to shut out cold, or let in air—several of these are necessary in the different stables.

V. Step ladder.

No. 1. A ground plan of a barn 60 feet by 40, shewing the stalls and seats of the upright posts dividing and supporting the barn.

No. 2. A section of the gable end of the barn, shewing all the timbers and scantling.

No. 3. The north section of the barn shewing the timbers and doors.

Inasmuch as the stone abutment of the bridge-way into the barn has to be built 8 or 9 feet from the back of the barn, to give entrance and air to the granary story, that part of the bridge has to be made of wood; hence the necessity of projecting the eve of the roof of the barn so as to protect the wood work from wet and consequent decay; and by boarding the outside and inside with a light frame of oaken lathes, 1 by 3 inches, two commodious corn cribs 5 by 11 or 12 feet will be formed, to throw corn into, in wet weather, as it may be husked in the barn. Under this bridge-way and these corn-cribs, there will be a convenient cart-shed, provided the barn be not built on too much of a declivity. From 3 to 5 feet is sufficient fall from the north end of the bridge-way to the south front of the barn, as the stabling is far more healthy when not much under ground. The earth may be removed from the foundation to the outer part of the bridge-way, so that the cost of it will be trifling, except for the wall around it to keep up the earth. By means of this bridge and covered-way, we not only gain a cart shed and two corn-cribs, but are enabled by it to get the carts, when loaded with either grain or hay, up into the barn floor, 16 feet above the floor of the stables, thus affording the facility of conveying the hay and grain, by means of a funnel, to be prepared for the purpose, into the feed passages and granary below. The hay mows being 17 by 37 feet, and 19 feet high, will hold a very large quantity, and besides a great deal may be stowed away above the square in the roof, there being no collar beams to take up the room. About one-half of these immense stowing rooms being below the eaving rail, which is $3\frac{1}{2}$ feet above the barn floor, the hay may be rolled off the cart into the mows, thus saving all the trouble and labor of pitching it up into the loft, as is the case in such stables and barns as have their floors on a level with the ground.

On the south front a cow-yard ought to be enclosed about 110 feet long, and from 60 to 100 feet wide, according to the number of young cattle to be wintered in it. The milch and working cattle being fed in the stalls renders it unnecessary for it to be large. In this yard there ought to be either a fountain or pump to supply the stock with water. And it will be necessary for the horses to have a separate trough and apartment in the yard, and there should also be a shed along the east end for the cattle to go under in stormy weather.

It will be seen, that in this barn, all the provender necessary for the winter's supply, whether of hay, straw, or grain, can be stowed away; and that, from its great conveniences, all the stock may be fed during that period of the year, without those having charge of them being necessitated to go out of doors; and should the precaution be observed, of hanging up the gears of each horse, on hooks to be provided for that purpose, behind them, which should never be omitted, such as

may be wanted may be harnessed without a moment's delay.

An implement-shed should, in addition to the buildings I have described, be erected near the stable, which beside its real utility in the preservation of tools and implements, always reflects credit upon the proprietor of an estate.

I think it will strike the intelligent farmer and planter, that by thus concentrating the out-buildings on an extensive plantation, convenience, economy and comfort, to man and beast, are all eminently consulted, and that in point of beauty in appearance, it very far surpasses the old plan, if it may be so termed, of having a barn here, a stable there, a corn-house in one place, and a cow-house in another—this latter arrangement always had in my view a most unsightly and un-system-like aspect.

If a thrashing machine should be intended to be used in the getting out of the grain, preparation for the horse-path may be made under the barn floor, in the cow stables, or in a part of one of the passages, from which a strap may pass upwards to a wheel on the machine.

ROBERT SINCLAIR.

GIBBES' IMPROVED CORN—We publish below, from the *Yorkville* (S. C.) *Patriot*, a brief though pithy correspondence between two practical farmers, on a subject of great moment to the agricultural interests. It was very happily said by *Dean Swift*, that "whoever could make two ears of corn, or two blades of grass to grow upon a spot of ground where only one grew before, would deserve better of mankind, and do more essential service to his country, than the whole race of politicians put together," and we believe we may accord to each of those gentlemen the full measure of that meed of praise, without subjecting ourselves to the imputation of being a flatterer.

The method of selecting his seed corn, as followed by Mr. Gibbes, is judicious, and we trust every agriculturist who raises a corn crop, will take counsel from the result of his experience, and pursue the same course. Indeed, were planters and farmers, generally, to adopt this plan, with respect to the saving of their seed from the whole range of their several crops, we have no doubt but that the happiest effects would be the result of their labors, in their melioration and improvement. Domestic animals in Europe, and particularly in England, have been brought to their present perfection by selecting exclusively for breeding, those combining the best points, for the respective uses for which they were wanted; and we see no reason why the same law which regulates the economy of the animal kingdom, may not, with equal success, be applied to the vegetable. The experiments of Mr. Gibbes, and those of every other gentleman who have made the trial, go to confirm the belief, that such would be the case. We therefore, are impelled to the belief, that by exercising due vigilance and proper care, in selecting seed corn from none but such stalks as are vigorous and large in their growth; fruitful in their yield, and which may have borne two ears or more of good grain; and, by being equally careful

in the culture, that in a few years, our planters would be able to banish from their corn fields, those unsightly dwarf stalks, which yield nothing but nubbins and reward the husbandman so indifferently well for his toils and his outlay.

Sept. 17th. 1834

Friend—Two years last spring I obtained some of your seed Twin Corn. I send in return one stalk with five good ears on it, and if you improve said corn for the space of two years and return me a stalk with six ears, raised on the pleasant fields of Oakley farm, I will try to be able in two years after to return you a stalk raised on the fertile fields of Busrow farm with seven ears. With due respect and esteem, I am yours &c.

W. S. GIBBES.

OLD COL. GILL.

Oakley Farm, Sept. 18, 1834.

Old Friend—I have to thank you for your note and stalk of corn with five good ears upon it and must acknowledge that you can beat me with my own seed, and that I can shew nothing like it; nor could I hope on my poor ridge of land to compete with your excellent farming on your flat bottoms—'tis now about 18 years since I first began to improve my corn, by selecting my seed from those stalks only which bore two ears; and the first year had difficulty to find as many stalks with two ears, as would give me seed; but now in a tolerable season, it is difficult to find a few stalks even with less than two, and from that to three and four good ears. The peculiar quality of my seed has shown itself particularly this year when my whole crop has suffered so severely with drought, yet you see two ears or a struggle for it wherever my seed was sown; but two fields sown each with different seed that had been highly recommended to me, there is scarcely a double eared stalk to be found in either—the few there are I shall carefully preserve and endeavor to improve, as I like the kind of grain rather better than that I am now cultivating. I shall preserve your five ears, carefully also—plant them separately—and next year, *Deo volente*, let you know the result—though I can hardly expect my land can support and bring to maturity such prolific offspring. Believe me as ever, with regard, yours, &c.

WILMOT S. GIBBES.

Old Col. Gill.

[From the Maine Farmer.]

CULTURE OF ROOTS.

Mr. Holmes:—I think that the cultivation of root crops as the winter food for cattle is the golden fleece of agriculture, and in no part of the globe can a greater profit be realized from this branch of husbandry than in the State of Maine, owing in part to our excellent grazing lands, which afford an ample supply of summer food for cattle. I believe that the soil of our State is better adapted to the raising of roots than that of the far famed Massachusetts, and in this branch of husbandry we may rival England, France, Germany or Holland; and our contiguity to the British Provinces will afford good markets for the disposal of much of our surplus products. Intelligent farmers differ in opinion respecting the relative value of the different kinds of roots as food for cattle. One distinguished agriculturist says that no root within his knowledge can compete with the Ruta Baga. Another prefers

Carrots, and declares that no husbandry beside can keep so great a number of cattle on a given quantity of land and at so little expense. Some writers claim the preference for the Mangel Wurtzel, or root of scarcity, and think this root superior to all others. A gentleman, no doubt an intelligent farmer, in his address before an Agricultural Society of a neighboring State, declares the Potato the most valuable of any root cultivated in this country, and reproaches some of his agricultural brethren for what he calls an overweening fondness for English agriculture, in cultivating turnips when the potato affords a more profitable crop. I think that some of all the roots above named should be cultivated, and I would not forget parsnips. This root affords an excellent fresh forage for cattle in the spring. One eighth of an acre of land, if suitable, and properly tilled, will yield parsnips equal in value to one or two tons of prime English hay, and the digging of the roots in the spring will do much towards preparing the ground for other crops. I would here observe that if Dr. Dean's statements are correct, this root may be grown for a great number of years in succession, on the same ground, without deteriorating; but I think this method liable to some objections.

Much has been said of late years about the culture of Silk, and I think it may be a profitable business, but the demand for this fabric can never be so great as that for the numerous products arising from the cultivation of roots. Beef, butter and cheese, leather, tallow, wool, mutton, pork, and good laboring animals may be produced in abundance when this branch of agriculture shall be well understood and appreciated.

Maine does not raise her own bread stuffs, it is said. Well, Mr. Editor, the cultivation of root crops will help to do away this reproach. The farmer who mows over, we will say, 40 acres of land to obtain hay sufficient to keep his cattle through the winter, may appropriate one half to the cultivation of wheat, adopting the clover system if he pleases, and the remaining twenty acres, under a proper rotation of crops, in grass too, and oats, to be mowed for fodder, will keep a greater number of cattle than the whole forty acres continued in grass, and I will add with less labour and less expense.

Indian corn is an expensive and frequently a very uncertain crop. I would not however discourage the cultivation of this plant on soils that are suitable, but I believe that the farmers of Maine may obtain twice or three times the nett profit from a given quantity of land cultivated with Ruta Baga, Mangel Wurtzel, carrots, or even potatoes, than the same quantity of land cultivated with corn. Shall I mention the immense quantity of excellent manure that the careful, skilful farmer may make who feeds his stock liberally with roots. A hint to the wise is sufficient, therefore, I will say no more on this point.

By a communication to the Committee on agricultural products of the Massachusetts Agricultural Society in the year 1821, it appears that Mr. Prince raised on his farm in Roxbury that year 656 bushels of Mangel Wurtzel, 400 bushels carrots, 537 do. Ruta Baga, 745 bushels of potatoes, and 400 bushels of turnips, besides other

vegetables for the use of stock on his farm. In all this it is said he finds an ample profit. Others in different parts of the country are said to be treading in the same course of successful experiment. I may here observe that this excellent farmer resides within a few miles of the Boston market and could if he wished to obtain the money and a high price, for his roots, but he prefers giving them to his cattle. Let the farmers of Maine think of this, especially those who live at a distance from market. They may turn all roots into clear cash with as great facility as the celebrated Mr. Prince, and make as much manure as he does if they will pursue the same judicious methods.

In Dr. Dean's Dictionary, we have the account of an intelligent Englishman, (travelling through the Northern Kingdoms of Europe for agricultural information,) who was assured by a Dutch farmer that the foundation of all good agriculture was the raising of roots, as the winter food for cattle. If this assertion is true, the agriculture of Maine must be in its infancy. I have heard aged people say that when potatoes were first introduced into New Hampshire, the people were afraid to use them in large quantities as food for either man or beast; that good farmers thought they had done well if they raised one or two barrels of this root in a year; at length a considerable farmer raised sixty bushels, and so great was the surprise of the good people of the granite State, that large numbers flocked together from considerable distances to see sixty bushels of potatoes. I would ask the question, whether some farmers at the present day are not as much frightened at Ruta Baga, mangel wurtzel, carrots, &c., as were the good people of N. Hampshire at potatoes, in days of yore. One writer says that the raising of roots for cattle is the great boast of the farming interest of England and Scotland. Another says that turnips and clover are the two great pillars of British agriculture. Now if the cultivation of roots has had such a surpassing effect on British husbandry, why may not the same cause produce the same effect on the agriculture of the State of Maine?

Feeding cattle liberally with roots will more than double the value of straw and other poor fodder; it gives them a keen appetite for dry fodder, and they will thrive better when fed with roots, and a very small quantity of the coarsest of dry fodder, than when fed wholly with the best of English hay. Let the farmer feed out dry fodder to his cattle as sparingly as the penurious man who is short of hay, and give them a liberal quantity of roots, and they may be kept in the best possible thriving condition.

Cattle, I have no doubt, desire a change of food as well as the human species. Confine a man to one article of food, though of an excellent kind, and he will grow tired of it—just so with cattle; they should not be fed wholly with dry fodder nor with one kind of roots, but their food should be varied as often as practicable.

I will say something in regard to the keeping of roots through the winter for the consumption of cattle. If the farmer pursues this branch of husbandry extensively, which I verily believe his best interest demands, a common cellar of course will not hold his roots. A cheap cellar may be

made where the ground is free of stones, sufficiently capacious to hold all the roots necessary for the support of a large stock of cattle, which may be covered with sticks of timber of a durable kind, and then covered with earth sufficiently deep to exclude the frost of our most severe winters. As vegetables are liable to sprout in a cellar of too great warmth, it is a good plan to have a pipe by which a sufficiency of cold air may be let in as occasion requires, and which may be closed if necessary in extremely cold weather; thus the farmer may govern the temperature of his cellar at pleasure. An entry may be appended to one corner of the cellar, the Southerly corner if possible it should be, so large that one man may conveniently stand up and turn round in it, with two doors, an outer door and an inner door, entering the cellar.

I will here repeat, that I think every farmer should raise a number of kinds of roots for the feeding of his stock, and I believe that Mangel Wurtzel, Ruta Baga and Carrots are preferable to potatoes in point of profit, where the soil is suitable; but if a farmer have land encumbered with stumps, stones, &c., he would do well to cultivate more potatoes and less of other roots.

I find that the agricultural societies of this state in offering premiums on crops have omitted Mangel Wurtzel—this I am very sorry to see, by so doing I think they have neglected a main article.

A. Y. F.

P. S. It may be expected that I should say something more in regard to the Canada thistle controversy. "Old Farmer," in page 122 of the present volume of your paper, has an article on this subject, in which he animadverts rather strongly on my method of destroying thistles. He compares my method to the war of the Trojans, which no doubt was expensive and burdensome; but as I stated before, my method costs nothing, and what is still better, by this method, the thistles may be mowed (when a grass crop is grown,) at the time and in the manner recommended by "Old Farmer." I think this writer can have no objections to thorough hoeing when Indian corn or potato ground happens to be infested with thistles. My plan is thorough culture of land when in tillage, bountiful manuring, plentiful seeding with grass seed, and mowing at the most proper time, which is about the time thistles are in bloom, and in rainy weather if possible.

Rumford, June, 1835.

[From the New York Farmer and American Gardener.]
CULTIVATION OF THE RUTA BAGA.

MR. EDITOR:—As I have been in the habit of cultivating the ruta бага for several years past, formerly with but poor success, but latterly unusually good, and believing it to be one of the most valuable crops that the grower of wool or the keeper of cattle can cultivate, I beg the liberty of communicating to the public, through your paper, the result of my experiments.

I formerly have been in the practice of sowing my seed in the latter part of June, and of having the plants to grow too thick on the ground; in consequence of which, I seldom obtained at the rate of five hundred bushels per acre; the roots being but small, and the tops quite too large.

My late practice has been to sow my seed in some of the last days of May, with Robbin's patent planting machine; rows as near twenty-eight inches between as possible, planting the seed once in three or four inches; taking care, after the plants get sufficiently large, to thin them so that they may stand twelve or fourteen inches apart. In this mode of planting I have obtained from one-half acre of land 700 bushels of roots, the ground being a turf, turned under a few days previous to sowing the seed; soil, sandy loam; sowed on the Ruta Baga, soon after the seed came up, one bushel of plaster, broadcast.

The last season, I raised from four acres of land four thousand bushels of ruta bagas, the account of which stands as follows:

To use of ground,	-	-	\$16 00
" 4 days' ploughing and harrowing	-	-	8 00
" 40 loads barn manure,	-	-	20 00
" 4 bushels plaster,	-	-	2 00
" Seed,	-	-	2 00
" 1 day's labor, planting	-	-	75
" 32 do. hoeing and thinning,	-	-	24 00
" 20 do. pulling and gathering,	-	-	15 00
			\$87 75
		Dr.	
By 4000 bushels ruta bagas,	\$400		
" 4 acres of tops,	24		
			\$424 00
			87 75
Nett profit,			\$336 25

In the foregoing estimate, I have called the roots worth ten cents per bushel, a price I consider them worth to fatten cattle and sheep, and the tops six dollars per acre; a price below what I should feel willing to take for them. My custom has been, for some seasons past, to take my lambs from my ewes, some time in the month of September, and put them into my ruta бага field to wean. The lambs trim the tops from the roots, which causes them to thrive as fast or faster than while taking the milk from the ewes, and prepares them for the winter better by far than any other feed that I have been in the habit of trying; and they eat the tops from the roots so clean, that it supersedes the necessity of cutting with an edged tool.

When the tops are sufficiently eaten off, the roots should be pulled out of the ground and permitted to lie in the sun until the dirt is sufficiently dry to rattle off by handling. No dirt should be permitted to go with the roots, if it can be avoided, for the dirt fills up the crevices and prevents the circulation of air, and causes the roots to heat and spoil. Two or three thousand bushels of roots may be thrown into a cellar together, if dry and clear from dirt, and preserved well; while one hundred bushels thrown in, in a moist state, together with dirt sufficient to prevent the circulation of air, will heat and spoil in a short time.

In raising seed, care should be taken that no cabbage, round turnip, or any root partaking its nature, should be permitted to blossom with or

near the ruta бага, lest the different plants should amalgamate, and injure the seed.

D. T. BUCK.

Lawville, April 13, 1835.

THE BREEDER & MANAGER.

[From the New-York Farmer.]

SOUTH-DOWN SHEEP. By S. Blydenburgh.
Albany, May 13th, 1835.

MR. MINOR:—Sir, from what had been told me by Mr. Bement respecting the South-Down sheep, then supposed to be on their passage from England in the ship Samson, which breed of sheep I understood had been improved with great care and attention by a Mr. Ellman, in England, and after having obtained the first prize at Smithfield the year past, were now coming here to Mr. R., I promised myself a treat in seeing them when they should come through this place; and I intended to have sketched a likeness of the best of them, if there had been any choice, and have sent it to you for the Farmer; but as ill luck would have it, I was out of the city when they came through here. But from the description given me by Mr. Bement, and from what I learned of their history by a letter to him from Mr. Francis Rotch, of ———, their owner, I am inclined to think they must be an important acquisition to the farming interest in this country. That is, to such farmers as will obtain the breed, and not suffer it to deteriorate by bad management.

I am convinced, that in a short time, the articles of wool, cotton and silk, will form the permanent basis of the farming interest in this country, and the chief staples of commerce. I believe also, that any breed of animals may be improved or deteriorated, by good or bad treatment, to an amazing degree; and from the improvements effected in the South-down sheep, by Mr. Ellman, I think him entitled, besides his own profits, to at least the gratitude of the public, wherever his breed of sheep may extend. I think there is no quality which can enhance the value of sheep in this country more than their hardness, in which from Mr. Rotch's letter, and from the appearance of the sheep, as described to me by Mr. Bement, after a stormy passage of 50 days, they must be allowed to excel any other breed. Were every farmer such as Mr. F. Rotch, or his father, hardness would not be of so much importance, as they would improve their sheep in that and every other good qualification; but as that is not the case, and as a majority of them will do well, if they get a good breed of sheep, and do not suffer them to run down, it is certainly of the first importance to introduce a breed that will bear hardship; and especially, as I understand Mr. R.'s sheep are very respectable as to the quantity and quality of the wool. I hope, therefore, you will give them due notice.

Cure for the phrenzy, or inflammation of the brain in cattle.—First lessen the quantity of blood by frequent bleeding, which may be repeated daily if required, and by which the great efflux of blood upon the temporal arteries will be lessened and much retarded. The following purgative drink will be found suitable for this disease, and

likewise for most fevers of an inflammatory nature.

Take of Glauber Salts, 1lb; Tarturzed Antimony, 1 drachm; Camphour, 2 drachms; Treacle, 4 oz. Mix and put the whole into a pitcher, and pour three pints of boiling water upon them. When about milk-warm add $\frac{1}{2}$ an ounce of laudanum and give it all at a dose.

This drink will in general operate briskly in the space of 20 or 24 hours; if not, let one half of the quantity be given to the beast every night and morning till the desired effect.

THE GARDENER.

TRANSPLANTING CABBAGES, AND OTHER PLANTS,

From hot-beds should be done when the ground is not wet; for, if worked in this state, it will be reduced to a sort of mortar, and be left hard and full of cracks when it becomes dry. The earth should be just so moist as to be capable of being finely pulverized, so that it may, when pressed about the roots, touch them in every part and lie close about them; and it should be freshly dug or stirred up just before the operation. Cabbages will live and thrive better transplanted in a fine mellow and moderately moist soil, under a hot sun, than when placed in a wet soil during rainy weather. Much more indeed depends on the mode of the operation than on the state of the weather.

There are some plants, however, which are so tender and juicy, cucumbers and melons for instance, as to be scorched and absolutely destroyed in a hot sun. When this is the case, they must be shaded upon their removal, by sticking a broad shingle in the ground on the south side, or two shingles so as partly to inclose them, meeting at an angle on the south.

It has been strongly recommended to dip the roots of young plants as soon as they are taken from the ground, into a mortar of soil and water worked together to the consistency of soft mud. This, by adhering to the roots, prevent their becoming dry for several hours until they are transplanted.

Care should be taken that the end of the root is not bent when set in the ground, also that the plant be set as deeply as possible without burying the leaves.—*Farmers' Reporter.*

[From the National Intelligencer.]

PEACH TREES.

This modest and beautiful tree, the parent of one of the most delicious of all fruits, is, if properly managed, perhaps the most easily cultivated and preserved, of all fruit trees. To sustain these observations, I mention my own experience. On a rented farm, on which I resided near ten years, I found but one good thriving peach tree when I took possession, and only a few stocks of that tree in any condition. Regarding it a duty which every man owes to society, to plant fruit trees, if in his power, I commenced raising the peach from the stone, and persevered in that plan during nine seasons, and left a considerable number of the very finest peach trees in the highest state of health when I removed.

There is no one other fact in natural history of the truth of which I am more convinced, than that the peach tree would, in any part of the middle or southern States, flourish, if three rules were observed:

1st—Plant the seed annually, so as to have new plants to set out annually; or what is much better, plant the seed where the tree is to stand.

2d—Whenever the tree commences to decay, cut it down as near the ground as possible.

3d—Plant the peach tree in your best soil, and work the ground around where it stands.

In the public prints we see this season, from all quarters, accounts of the destruction of the peach tree by the frosts of last winter. In some cases the body of the tree is said to be killed while the roots are living.

The peach tree is evidently a native of a much warmer climate than that of the central United States. In Louisiana, Mississippi, and Florida, I have seen it in flower, and in leaf partially, at every winter month. It is of course in the southern section of the United States an imperfect evergreen. In all situations and climates where I have seen it growing, from N. lat 29 deg. to 45 deg. it is a tender tree, and demands care; but with care and skill, there is no other tree which yields to man a more grateful and certain return.

Similar to all organized beings, when wounded by any adverse cause, the peach tree exerts the principles of life, or more distinctly the principles of self-preservation, and in the very case of injury by frost, this operation of nature becomes so striking as to arrest attention from the most casual observer. In the National Intelligencer of May 28th, (1835), quoting from the Wyoming Republican, I have read the following:

"A few weeks since we mentioned that the peach trees in this neighborhood were generally killed by the coldness of the winter. Upon close examination, we find the roots of the trees are alive, and some of the limbs of many are putting out leaves; though in general the tops are dead."

Now, from actual experience, I am fully convinced, that if those trees, the roots of which are alive, and exerting their resources to save the branches, were relieved by amputation of the whole tree, to within one, two or three inches of the ground, that numerous fine healthy young stems would be seen rising, and which in two, or at most three years, would be loaded with fruit. This statement is made from actual experiment, within twenty miles from your office, and never failed in a single instance. The preservation of the trees in this case is very greatly enhanced by keeping the ground loose and clear of weeds near the roots.

Let me, in conclusion, say to the farmer, plant the seed of the peach annually, keep the ground cultivated around the root, and when by any means the stock is found in a decaying state, cut it away, and leave the root to expend its resources on the production of new scions, and one of the most ornamental trees and most delicious fruits may be secured with almost unerring certainty.

A TRAVELLER.

[The above is from a practical gentleman, well known to the editors.]—*Nat Int.*

CANADA PLUMS.

The plum trees all over this section of the state and in the adjoining parts of Vermont, present a most singular appearance. The fruit at this point of the season, unless injured in some way, should be about the size of a pea, perhaps not so large. But the fruit every where presents a most unnatural size, presenting rather the appearance of green lemons than any thing else we can remember, swollen, wrinkled, and puffed up, some long, others round, an inch long and nearly as thick; they are of a bright green or yellow color, tinged with a beautiful scarlet on the outside, while they are completely empty within. This fruit—the large red plum—in the natural course of vegetation, is at this time, as we remarked, about the size of a pea; and those who have plum trees, as there are many on the Connecticut, are exceedingly puzzled to account for this state of things. We had a branch brought to this office from Cornish which really has a very curious and singular appearance. We are informed the trees have some ten years back suffered in the same way, but the cause is a mystery. Nothing like a worm is to be found in the swollen fruit.—*Claremont National Eagle.*

MISCELLANEOUS.

IMPROMPTU ON THE DEATH OF MRS. HEMANS.

The following beautiful and just lines were composed by a gentleman of this city, on seeing the annunciation, in the late foreign news, of the death of Mrs. *Felicia Hemans*, who died in Dublin, Ireland, on the 18th May last. The name of this truly gifted woman is familiar to most American readers—the moral beauty, and gentle, though elevated, feeling, which was breathed through every line of her poetry, rendered her not only beloved at home, but every where else, where the melody of her song was heard. It has been very happily and chastely said of her by a highly distinguished cotemporary, that she was "the daughter of song"—one

"Whose gentle breast,
Was like the snow on Rona's crest"

in its purity; but unlike that snow, it was warm with the softest and tenderest feelings." Truer or more graphic words never fell from the pen of a writer! She deserved every thing that is said of her; for she combined in her own character all that was excellent in our nature; and the subjoined lines, in the language of eloquence and piety, speak but the praises which is due to her own rare merits and exemplary virtues:

"Joy!—joy!"—cried an angel of light,
As winging her way, through the realms of air,
She hitherward sped, in her dazzling flight,
Her message of mercy and love to bear.
"There's joy in the radiant hosts of heaven,
"The word hath been spoken and eager I fly,
"To welcome a spirit whose sins are forgiven,
"And bid her repair to her home on high.
"No longer pent up in thy prison of clay,
"Sister soul, shalt thou dwell from thy kindred afar;
"But released, thou shalt speed on thy trackless way,
"And bask in the beams of each radiant star.
"No longer on earth, amid sorrows and pains,

"Art thou, loved one, Felicia, permitted to dwell,
"But called to thy maker, thou'lt mingle thy strains,
"With the songs of bright seraphs, his praises who tell."

As thus spoke the herald, her mission was o'er;
To the soul of the blest one, the message was given,
And the heart of sweet Hemans now flutters no more,
Her spirit's glad advent is welcom'd in Heaven.

Truth is the basis of all other virtues, and he who does not hold it beyond all price—who would not adhere to it, through every vicissitude and every peril—who would not cherish it as the anchor of his hope, is lost to the impulses of honor and self-respect. It being the foundation of every other human attribute worthy of appreciation, it follows as a natural consequence, that if it be abstracted, the whole moral superstructure falls to the ground. The individual, therefore, who can so far forget himself as to give utterance to a falsehood, is more an object of abhorrence than of pity, and though we may deplore as men, the existence in his breast of that depravity, which may have reduced him to a level so revolting to our nature, we cannot without doing violence to our principles lend him our sympathy. Hence then every parent should feel himself imperiously called upon by every endearing consideration, to teach his children the value of truth from their earliest lisping. Its beauty should be daily exhibited before their eyes, not only in parental precepts; but to these should be superadded, the force of example. For he, who teaches, should illustrate, by his own good deeds, his belief in the excellence of the doctrines he may desire to inculcate, as without practice, professions become ridiculous in the sight of others, if not positively pernicious in their tendency upon private and public morals. Professions without practice, is like faith without works, deficient in the evidence of their sincerity, that most essential ingredient in their composition, and which alone, can impart dignity to human actions, sanctify human motives, and adorn the human character.

RICE DELICACIES.—*A rich rice pudding.*—Boil half a pound of rice in water with a little salt, till quite tender, drain it dry. Mix it with the yolks and whites of four eggs, a quarter of a pint of cream with two ounces of butter melted into it, four ounces of beef suet or marrow, finely spread, three-quarters of a pound of currants, two spoonfuls of brandy, one of peach water or nutmeg and lemon peel; when well mixed, put a paste round the edge, and fill the dish; slices of candied orange, lemon, or citron, if approved.—Bake in a moderate oven.

Savory rice.—Wash and pick some rice, stew it very gently in a small quantity of veal or rich mutton broth, with an onion, a blade of mace, pepper and salt; when swelled, but not boiled to mash, dry it on the shallow end of a sieve before the fire, and either serve it dry, or put it in the middle of a dish, and pour the gravy round, having heated it.

Besides the above, it is a good food for children; and it may also be used for the thickening of soups, custards, pies, &c.

SPRUCE BEER.—Take three gallons of water, of blood warmth, three half pints of molasses, a

table spoonful of essence of spruce, and the like quantity of ginger—mix well together with a gill of yeast; let stand over night, and bottle in the morning. It will be in good condition to drink in 24 hours. It is a palatable, wholesome beverage.—*Cultivator.*

FOREIGN ABSTRACT.

Intelligence from Paris to the 5th of June has been received; nothing decisive with respect to the bill for the payment of the American indemnities has taken place. The committee of the Chamber of Peers; made their report on the 4th June; but had been postponed to the 11th. We see nothing to change our belief that it will finally pass. The House of Peers were engaged in the trial of the Lyons insurgents. The French government had not disposed of the call for intervention in behalf of the queen of Spain; and it is said that the ministers are divided on the question.

The information from the other European powers are wholly unimportant.

Mexico.—Many of the states of Mexico have declared in favor of a limited Monarchy with Santa Anna at its head. So much for the revolutions, counter-revolutions, and oceans of blood, that have crimsoned her soil in the struggle of her people for liberty. The words of the late John Randolph—"that you might as well attempt to build a seventy-four out of fir wood, as to make Republicans out of the Mexicans and their South American neighbors"—seem no longer a prophecy.

Still Later.—Another arrival brings Paris papers to the 12th and Bordeaux papers to the 14th June, both inclusive. The packet Ship Isaac Classon, did not, however, leave the latter port until the 16th, and had a communication with the shore on the 15th, on which day the Captain reports that his Broker came on board, and informed him that the *indemnity bill* had passed the Chamber of Peers, by a large majority, precisely in the form in which it was reported.—We take it for granted that it passed in the shape it came from the Chamber of Deputies, though this is but conjecture. If so, the clause requiring the "*explanation*," is retained—but this is no stumbling block in our eyes; we believe the only explanation which ever will be, has already been given, and we believe it will be considered satisfactory. But whether or no—this we are certain of—the people of this country will never consent to let a foreign power interfere between them and the chief Magistrate: however they may differ among themselves, foreign intrusion will always be hailed as the signal to rally as one man.

The three other parties to the quadruple treaty, to wit, England, France and Portugal, have arranged the question of intervention it is understood, in favor of the queen of Spain. Should this turn out to be the case, the career of Don Carlos and his troops will be a short one in Spain.

MARKETS.—*Liverpool June 8.* Cotton—uplands 10d a 12½d; Orleans 9 5-8 a 14d a 14½; Alabama 9 5-8d a 13d. Sea Island 23d a 28d—market depressed early part of the week and declined fully 3-8d; but the demand increased towards the close and the decline was regained.

Havre, June 9. Georgia cotton, 158f. Tennessee 140f.

Bordeaux, June 12. Cotton continues to enjoy a favourable market—220 bales brought 143f. Prices in Paris June 11th, advancing.

Later from England.—London papers to the 10th of June, are received. The Earl of Gosford has been appointed governor of the Canadas, &c.

Purchases of Va. tobacco, good and fine dark sweet qualities at 5½d to 7d: ordinary and middling dark rejected tobacco at from 3½d to 4½d—most inferior at 3½d. Holders firm and sanguine of price advancing: an extensive demand for exportation and prices from 3d to 6d per pound higher. Cottons nothing more—prices supported.

DOMESTIC SUMMARY.

Mr. Robert R. Stewart, a wealthy gentleman residing in the precincts of the city of Philadelphia, was on Monday week last, attempted to be assassinated by an African servant whom he had brought with him to this country from Trinidad de Cuba, where he had been American Consul. Having bought him there at a cost of \$600; on being about to return to this country, he emancipated him, and gave him his choice either to remain, or to accompany him to Philadelphia. He chose the latter, and has been a confidential servant in the family, on hire, ever since. For some offence he sought revenge on Monday evening, while his master lie asleep, by laying open his head with an axe. This brutal outrage so increased the mob who gathered about the premises, that they made indiscriminate assaults upon all coloured persons who chanced to pass, and ultimately proceeded to attack the houses in the suburbs of the city occupied by that class of people, setting fire to one of the buildings, and opposing the firemen in their efforts to extinguish it.—Several persons were severely wounded, and others beaten and otherwise maltreated. These occurrences are to be regretted, and still the more so, as the summary administration of justice seems to be growing into fashion in our country, to the disgrace of our institutions, and to the destruction of public morals, the peace and quiet of the community and the supremacy of the laws.

Large sales of U. S. Bank stock have been made in N. York, at 110½ per cent. dividend off.

The estate of Mrs. Ann Rogers late of Philadelphia, deceased, was sold on the 3d and 4th July at auction. It consisted of 1211 lots and brought \$669,310.

Lt. J. M. Berrien of the U. S. Army who has just concluded a survey of the route of a railroad from Detroit to Lake Michigan has made a report highly favorable to the undertaking. To our western brethren we say go on with your work, for every good road adds additional tenacity to the element which binds us together as a great common brotherhood.

CONTENTS OF THIS NUMBER.

Notice of the harvest—do. of Mr. Sinclair's drawings—cooking by gas—ravages on the Elm tree—annoyance of the Mole, preventives, &c.—a noble cheese—Mr. Robert Sinclair's drawings of buildings on an opulent gentleman's homestead—Gibbes' improved corn—culture of roots—do. of the Ruta Baga—South-down sheep—cure for the phrenzy of the brain in cattle—mode of transplanting cabbages—culture of peach trees—Canada plums—beautiful impromptu on the death of Mrs. Hemans—truth and its attributes—rice delicacies—spruce beer—foreign abstract—domestic summary—prices, &c.—advertisements.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,	bushel.	2 50	
CATTLE, on the hoof,	100lbs	5 50	6 50
CORN, yellow,	bushel.	90	93
White,	"	95	98
COTTON, Virginia,	pound.	17½	18
North Carolina,	"		
Upland,	"	18½	19½
FEATHERS,	pound.	37	40
FLAXSEED,	bushel.	1 25	1 37½
FLOUR & MEAL—Best wh. wh't fam.	barrel.	8 00	8 50
Do. do. baker's,	"	7 50	8 00
Do. do. Superfine,	"	6 75	7 25
Super Howard street,	"		7 00
" " wagon price,	"		6 75
City Mills, extra,	"		
Do.	"	7 00	
Susquehannah,	"	Sales	6 75
Rye,	"	5 00	5 12
Kiln-dried Meal, in hhds.	hhd.	20 00	
do. in bbls.	bbl.	4 37	4 50
GRASS SEEDS, red Clover,	bushel.	5 00	5 25
Timothy (herds of the north)	"	2 50	3 00
Orchard,	"	none	
Tall meadow Oat,	"	2 00	2 50
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.	18 00	20 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
HOGS, on the hoof,	100lb.	6 25	6 50
Slaughtered,	"		
HOPS—first sort,	pound.	12	
second,	"	10	
refuse,	"	8	
LIME,	bushel.	33	35
MUSTARD SEED, Domestic,	"	5 00	6 00
OATS,	"	50	53
PEAS, red eye,	bushel.		
Black eye,	"		1 25
Lady,	"		
PLASTER PARIS, in the stone,	ton.		3 12
Ground,	barrel.	1 37	
PALMA CHRISTA BEAN,	bushel.	2 00	
RAGS,	pound.	3	4
RYE,	bushel.	90	
Susquehannah,	"	92	
TOBACCO, crop, common,	100 lbs	4 00	5 00
" brown and red,	"	5 00	7 00
" fine red,	"	7 00	9 00
" wrappery, suitable	"		
for segars,	"	6 00	12 00
" yellow and red,	"	8 00	12 00
" yellow,	"	9 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	4 00	5 00
ground leaf,	"	5 00	9 00
Virginia,	"	5 00	10 00
Rappahannock,	"		
Kentucky,	"	6 00	9 00
WHEAT, white,	bushel.	1 50	1 60
Red,	"	1 40	1 45
WHISKEY, 1st pf. in bbls.	gallon.	37	37½
" in hhds.	"	36½	37
" wagon price,	"	33	33½
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 50	
To Wheeling,	"	1 75	
WOOL, Prime & Saxon Fleeces, ...	pound.	62 to 75	26 to 28
Full Merino,	"	52	62 24 26
Three fourths Merino,	"	45	52 23 24
One half do.	"	40	45 23 24
Common & one fourth Meri.	"	35	40 22 24
Pulled,	"	38	40 23 26

VALUABLE STOCK FOR SALE.

A FULL-BRED Durham short horn yearling BULL, a very superior animal; a 7-8 blood, same age; also two COWS, 4 years old, 3-4 blood, in calf by a full-bred Bull. Pedigrees given in full. Applications for any of the above cattle to be made to the Editor of the Farmer and Gardener, by whom the terms will be made known.

Letters from a distance must be post paid. June 30th.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.		
BACON, hams, new, Balt. cured, ..	pound.	11	11½
Shoulders, do.	"	10	10½
Middlings, do.	"	10	10½
Assorted, country,	"	9	10
BUTTER, printed, in lbs. & half lbs. ..	"	18½	25
Roll,	"		
CIDER,	barrel.		
CALVES, three to six weeks old, ..	each.	3 00	6 00
Cows, new milch,	"	17 00	30 00
Dry,	"	8 00	12 00
CORN MEAL, for family use,	100lbs.	2 00	2 06
CHOP RYE,	"	1 87	2 00
Eggs,	dozen.		
FISH, Shad, No. 1, Susquehanna, ..	barrel.	7 75	
No. 2,	"	6 75	
Herrings, salted, No. 1,	"	4 37½	4 50
Mackerel, No. 3,	"	4 50	4 62
Cod, salted,	cwt.	2 25	2 75
LARD,	pound.	10	10½

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	PER.	FROM.	TO.
U. S. Bank,	pal		
Branch at Baltimore,	do		
Other Branches,	do		
MARYLAND.			
Banks in Baltimore,	par		
Hagerstown,	½a		
Frederick,	do		
Westminster,	do		
Farmers' Bank of Mary'd, do	do		
Do. payable at Easton,	do		
Salisbury, 5 per ct. dis.	do		
Cumberland,	½a		
Millington,	do		
DISTRICT.			
Washington, } Banks, ½			
Georgetown, }			
Alexandria, }			
PENNSYLVANIA.			
Philadelphia,	½a		
Chambersburg,	¾a		
Gettysburg,	do		
Pittsburg,	1½a2		
York,	½a		
Other Pennsylvania Bks. 1½a2			
Delaware [under \$5] 3a4			
Do. [over 5] ½a1			
Michigan Bks. 5a			
Canadian do. 5a			
VIRGINIA.			
Farmers Bank of Virginia, ½a			
Bank of Virginia,	do		
Branch at Fredericksburg do			
Petersburg,	do		
Norfolk,	do		
Winchester,	do		
Lynchburg,	do		
Danville,	do		
Bank of the Valley, do			
Branch at Romney, do			
Do. Charlestown, do			
Do. Leesburg, do			
Wheeling Banks, do			
Ohio Banks, generally 3a½			
New Jersey Banks gen. 1½a2			
New York City, ½a			
New York State, 2½a3			
Massachusetts, 2a2½			
Connecticut, 2a2½			
New Hampshire, 2a2½			
Maine, 2a2½			
Rhode Island, 2a2½			
North Carolina, 3a4			
South Carolina, 2½a3			
Georgia, 4½a5			
New Orleans, do			

FOR SALE,

A TWO years old three-fourths Devon BULL. He is of fine form and medium size—he has been fed as dry cattle usually are. Having no use for him, his price will be very low.

June 9th.

SINCLAIR & MOORE.

DALE'S NEW HYBRID TURNIP.

THE subscriber now offers to the agriculturists a new and decidedly superior variety of Turnip, originated by R. Dale, Esq. an intelligent farmer, near Edinburgh, Scotland; it was obtained by unwearied attention in crossing the Swedish or Ruta Baga Turnip; it is superior in size and flavor to the Ruta Baga; is closer and finer in texture; it is as rapid in its growth as the white Flat Turnip. In fact, it includes the great desideratum in the selection of a proper variety of the Turnip which is to obtain the greatest possible weight at a given expense of manure. This Variety seems to be more adapted to this end than any other sort introduced; it will be found superior in quality to any of the White Field Turnips, and keeps longer than any of them, and very near as long as the Ruta Baga—the color is yellow—the shape oblong. Price 25 cents per ounce. The season for sowing is at hand.

R. SINCLAIR, Jr.

At Sinclair & Moore's Maryland Agricultural Repository. June. 30th.

LUCERNE SEED.

FOR SALE ON PLEASING TERMS,

500 LBS. fine quality LUCERNE or FRENCH CLOVER SEED. This is one of the most valuable grasses which has as yet been introduced into cultivation in our country, and can be recommended as being particularly adapted to the purposes of soiling, as it is fit for the scythe fully two weeks before the common Red Clover, and can be advantageously cut several times in the course of a season. Persons sowing this species of Clover, should also sow with it half a bushel of Rye, or some other grain to the acre, so as to protect it from weeds the first year, or until it attains its wonted strength and becomes sufficiently matted to smother the weeds. The quantity of seed sown to the acre is 18lbs.

ALSO, SCARLET CLOVER, or Trifolium Incarnatum, a very early sort, possessing many advantages.

St. FOIN, and BURNET GRASS seed, both highly spoken of for culture in high, dry soils, as improvers of land—which, together with

RUTA BAGA TURNIP, WHITE FLAT, YELLOW BULLOCK, EARLY DUTCH, and many other sorts, all of the best varieties of Turnip Seeds, for field and garden culture, are confidently recommended as of the very first quality, being selected with great care, and due regard paid to their freshness.

R. SINCLAIR, Jr.

At Seed Store connected with this Office.

June 2.

50 BUSHELS OF BUCKWHEAT, suitable for seed, just received and for sale. Apply to
June 16th. SINCLAIR & MOORE.

BAKEWELL SHEEP.

INQUIRIES have been made of the editor of this paper at what prices a moderate number of Bakewell sheep, of pure blood and approved forms can be procured for. Persons having such to dispose of, will please address the editor by letter post paid, stating price, age and number, which they may be willing to sell. The sheep

RICE MEAL.

FOR sale a few kegs (containing 40lbs) of nicely manufactured rice meal, a delicious and wholesome article. Apply to
May 19 SINCLAIR & MOORE, Light street.

DEVON COW AND CALF.

FOR sale, a first rate DEVON COW, five years old this spring, of the best blood and most beautiful form. She is altogether one of the most perfect animals of her kind, and is in calf to a first rate Devon Bull. She has also by her side a BULL CALF, two months old, equal in all respects to any other calf of his kind, and age. The price of the two animals is \$200, and they will be delivered in Baltimore. Address

I. I. HITCHCOCK, Philadelphia.

June 9th, 1835.

3t.

TERMS OF THIS PAPER.

1. Price five dollars per annum, payable in advance. When this is done, 50 cents worth of any kind of seeds on hand will be delivered or sent to the order of the subscriber with his receipt.

2. The manner of payment which is preferable to any other for distant subscribers, is by check or draft on some responsible party here, or else by remittance of a current bank note; and to obviate all objection to mail transmission, the conductors assume the risk.

3. Subscriptions are always charged by THE YEAR, and never for a shorter term. When once sent to a subscriber the paper will not be discontinued (except at the discretion of the publishers) without a special order, on receipt of which, a discontinuance will be entered, to take effect AT THE END of the current year of subscription.

4. Subscribers may receive the work by mail either in weekly numbers, or in monthly or quarterly portions; or else in a volume (ending in May annually), handsomely pressed, half bound and lettered (to match with the American Farmer) by such conveyance as they may direct: but the \$5 must in all these cases be paid in advance.

ADVERTISEMENTS relating to any of the subjects of this paper will be inserted once at one dollar per square, or at that rate for more than a square, and at half that rate for each repetition.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 13.

BALTIMORE, MD. JULY 28, 1835.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, JULY 28, 1835.

THE CROPS.—On comparing our accounts from Maryland, Virginia, Pennsylvania, and New Jersey, we are truly gratified to learn that the wheat crops have turned out beyond all expectation. In portions of each of these states it has suffered severely—in some parts amounting almost to a loss of seed; but on the whole, we believe, the crop has been a fair one, and what will be welcome news to the millers, the grain is generally heavy. The rye crop is a good one, so also is the oats: and as for the grass, it has been good beyond all former comparison, every where that we have heard from.

We saw a field, of, perhaps, twenty acres of timothy, clover, meadow oats and orchard grass, mixed, near this city a few days since, standing so dense, and so prolific in its growth, that there was hardly room to cure it on the ground on which it grew.

A few blades of the timothy promiscuously plucked from the same field measured 4 feet 11 inches.

The corn which in the early part of the season suffered from the cold and the cut worm, has been warmed into vigorous vegetation by the genial influence of the recent warm suns, and bids fair to return to the husbandman a generous reward for his labors.

Having been invited by a friend a few days since, to witness the operation of reeling silk, by a lady of this city, we availed ourself of his politeness and were more than gratified by the visit. It was to be sure silk-making on a small scale; but still it was a most successful experiment on the part of a lady, who with very trifling lights upon the subject, went to work, with that indomitable spirit of her sex, which no difficulties can overcome. A friend last year gave her a few worms, which she fed and made about two hundred cocoons from. The labor of the worms at an end,

the next thing to be done was to reel it, and make it into sewing silk. She had no silk-reel—none of the usual appliances necessary for the purpose. What was to be done? Should she quail before the difficulties that beset her? No, that would not comport with her views. In the garret there was an ancient heir-loom of the family, which had been carefully stowed away among the rubbish of the good old days when thread stockings and large silver buckles were worn. Ah! but that was a *thread-reel*. True, it was a thread-reel; but then could not the ingenuity of a lady supply whatever might be deficient in its construction? If it would reel flaxen thread, why not silk? Having preconceived the possibility of success, and determined that nothing should be wanting to deserve it, the case was a clear one, and down from its ante-deluvian retreat the reel was brought, furbished up, and made to look almost as good as new—and in a very short time, aided by the genius and tact of the fair artist, it performed its office exceedingly well; and as a proof of it we were shown a specimen of the sewing silk made from the gossamer web reeled on it, which for evenness, beauty of twist, and glossiness of appearance, was equal to most of the imported kinds. The lady had just finished reeling the silk made the *present* season, which was still on the reel, when we were there. It was beautiful in texture, and reflects great credit upon her good taste, perseverance and skill, as without any of the necessary conveniences, she has made an article no less excellent in quality, than the example she has set, will, we sincerely trust, prove salutary and wholesome in its incitement of others to tread in her laudable footsteps.

We are highly gratified to learn from several quarters that attention has been paid to planting increased quantities of potatoes, and we hope *turnips* will receive the same distinction,—and we shall be still more gratified if this should lead to the culture of roots more generally, as the neglect of them is a great oversight.

TURNIPS.—The period is fast approaching when *turnips* should be sown, and the time has already arrived, when the ground should be gotten ready, therefore, agriculturists should even put themselves to a little trouble, to prepare a few acres to receive this excellent root—a root which

adds so much to the yield of a dairy, and to the comfortable keep of stock of all kinds.

A MAMMOTH STRAWBERRY.—The editor of the *Genesee Farmer*, printed at Rochester, New York, was presented on the 10th inst. with a strawberry measuring $8\frac{1}{2}$ inches. It was of the methven variety, and of the coxcomb shape.

LARGE BEET AND TOMATOES.—The editor of the *Norfolk Beacon*, has been quite in luck in the vegetable way. A friend has presented him with a large *Beet* raised by Mr. James Wilson, near Hickory ground Meeting House, measuring 24 inches in length, and 13 inches in circumference—and Mr. *Raymond Gervais*, presented him with several fine tomatoes, which were produced in his garden, near the borough of Norfolk. Three of them were weighed in the presence of one of the editors, and the largest weighed 27 oz.

The sagacious editor of the *Genesee Farmer*, says that the failure which attends the cultivation of most root crops in drills, proceeds in a great measure from a neglect of weeds in their early stages.

It has been estimated that an acre of ground sown broad cast with 2 bushels of corn, will yield ten tons of hay: now would not those who have large stocks of milch cows, find it to their interest to sow a few acres either for winter feeding, or to soil their cattle with during autumn, when most pastures are indifferent. An objection has been raised against broadcast corn as winter fodder, on the ground that it is difficult to cure, and if not properly dried, subject to combustion. This objection, however, is not of much moment, as it is within the power of every farmer to cure it well, and there is no excuse for its not being so done; but even admitting that a case might occur, wherein an opportunity of thorough curing was denied, a little salt judiciously used in stowing it away, would deprive it of its injurious tendency to involuntary combustion, and add greatly to its quality and palatableness.

As green food for soiling, its efficacy cannot be questioned, and, therefore, whether intended to be laid by for winter or not, no farmer should suffer his milch cows to be pinched through the fall for the want of green food, which can be so easily provided for them, and at so little cost.

Millet might also be sown for winter fodder; there is time enough for it to mature a heavy crop of hay, which would be eaten by the horses or cattle with the utmost avidity. From six to eight quarts of seed sown to the acre would, in good soil, produce from a ton and a half to two tons of good hay.

GERMAN GESE.—A Rhode Island paper states that the late Judge *Sission*, of that state, imported a short time before his death from Germany, a breed of *Geese*, of the purest white—beautiful as Swans, which weigh when fat from 18 to 22 pounds; that their flesh is of exquisite color and flavor; feathers abundant and of the first quality, and that they are perfectly quiet in their disposition. Though we confess we never had much *penchant* for geese, and that our days for gormandizing are now numbered with the things that have been, we are almost vain enough to think, if we could, by any possible effort of our ingenuity, get one of them on our table during the ensuing winter, that we could discuss it most excellently well.

VIRTUES OF THE YARROW.—The *yarrow*, an herb that may be found in every field, is one of the most valuable remedies for all *affections of the kidneys* that can be found in the whole catalogue of curative medicines, and it is equally salutary in incipient affections of the *piles*, as also in cases of the *Erysipelas*. The mode of preparing it is this: Put $\frac{1}{2}$ lb. of the flowers into half a gallon of spring water, boil them for ten minutes, then strain, cool, and bottle the decoction, adding to each bottle full one ounce of refined salt-petre, and a gill of old cognac brandy. A wine glassful to be taken fasting in the morning, another at noon, before dinner, and a third one on going to bed at night.

One of *Lane's Endless Chain horse power, and Thrashing Machines*, being at work in the vicinity of this city, the week before last, on the farm of Mr. Sterling, we went there to examine it, and see its performance for ourself; and in simple justice to its ingenious inventor, we must be permitted to observe, that it more than realized our expectations. The boy who had the machine in charge, (it being one which is sent about the country for the purpose of hire,) was gearing his horse when we arrived, and we think it was not more than five minutes from that time, until he had the thrasher in full operation. The horse works on an inclined plane, about 2 feet wide by $8\frac{1}{2}$ feet long. The bottom of this inclined plane is made of iron rods, placed pretty close together,

which are connected at each end by iron clasps; outside of which, on every other rod, are cast-iron anti-friction rollers, which run on small iron rails, placed under the rollers for that purpose. The whole chain forms a perfect and simple band, suspended on two small drums, at a suitable distance from each other. Attached to the box in which the Endless chain is contained, is a cog-wheel, around this, a leather strap is placed, which is connected with the thrashing machine. This, by the treading of the horse on the inclined-plane of rods, puts the whole in motion, and performs the work of getting out the grain. There were two persons engaged in feeding and three in clearing away the straw, all of whom were kept busy. On examining the straw, we found the grain had been separated from it perfectly clean, and that it was not broken or injured. We have scarcely ever seen a machine where there were such an union of simplicity, power, and durability, or where so much was effected in so small a compass. Independently of its application to this particular use, the horse-power itself, can, and we think will, be introduced to all machinery, in which farmers are interested. It could with all possible ease be made to perform the motive-power of the various mills, and machinery of whatever description, on a landed estate; and from its simplicity, must ultimately take the place of many of the other horse-powers, now in use, especially as it is difficult of being put out of order.

A word with respect to the horse. His confined situation gave to his labor rather the aspect of uncomfortableness; but we suspect it was more in appearance than reality; for he seemed to point his iron-frosted-toes with no little degree of pride, and to feel that he was rather an *important* personage, engaged in the performance of an *important* duty, which would produce *important* results, and in corroboration of this, his owner assured us that it was his custom to get fat while engaged in *treading* out the grain, and for the sake of the horse, we hope it may be the case; for judging from his fine *frame*, we should take him to be a noble animal when in a good and healthful state of obesity. But really, at present, we must confess, though he is *high in bone*, has many *obvious points*, and has no redundant *flesh* to incommode the action of the muscles, we think he would be better prepared to undergo the toils of his inclined-plane-railway, if his *bones* and *points*, were not quite so visible.

DYEING—We commence to-day an article from the "*Transactions of the Essex Agricultural Society*," on the subject of *Dyeing*, and shall con-

clude it in future numbers. The subject of coloring cotton, woollen and other yarns, is one of deep interest to every farmer and planter, and we feel assured that there is no good housewife but will thank us for placing before her, a chapter so rich in all that concerns the most difficult, though beautiful, art of fixing on cloths, durable colours.

We publish the subjoined out of gratitude for the pleasure we derived in reading it—and we are sure if our subscribers should only feel but a tithe of what we did, they will thank us for its insertion. Such farmers as Mr. Linn, are, indeed, as the salt of the earth, and would that we could reach the ear of every man in this land engaged in the cultivation of the soil, that we might impress upon the minds of all, the necessity of making the grass-culture a primary branch of his husbandry.

[From the Winchester Virginian.]

The following is a deserved tribute to one of the best farmers in our country. We have ourselves enjoyed the gratification of witnessing the skilful husbandry on Squire Linn's farm, and can bear testimony that "A Stranger" has not spoken more highly of it than is merited:

WINCHESTER, July 2, 1835.

Messrs. Editors:—I could not have wished for a more pleasing gratification; or one more appropriate to a farmer, than I enjoyed the other day, in a ride over the farm belonging to William Linn, Esq., of Frederic county. Mr. Linn's farm consists of five hundred acres—one half of which only he intended to clear, and this half he has so judiciously divided into twelve or thirteen fields, that almost every one of them enjoys an abundant supply of water. His pastures are uncommonly luxuriant; and in riding through them, the clover and other grasses brushed our stirrups, and might afford a good crop of hay, but it was said Mr. Linn did not need it, having already cut and housed more than fifty acres of the finest clover. The cattle, as might have been expected on such pastures, all looked well, and the full-uddered mothers in particular appeared pleased as it were to have an opportunity of showing how much they were delighted and grateful for the abundance of their good cheer. Young horses too, kept prancing around and around us, among which I noticed a beautiful and very sprightly *Industry* colt, of which, we were told, its master was not a little proud.

The present crop of wheat on the farm, although it has suffered like other crops of the same sort from the inclemency of the winter, is yet a good crop when compared with many others in the country; and as preparatory for the next, Mr. Linn has already hauled out and ploughed into his clover fallow, one hundred and seventy wagon loads of rich manure.

But with how much skill soever this farm has been divided, and with how much convenience soever the fields are made to communicate with one another, by more than thirty pair of bars and gates, still the farm can scarcely be called a counterpart of the other improvements,

In his house, without sacrificing any thing to mere external appearance, Mr. Linn has obtained every accommodation necessary, with the utmost simplicity and neatness. His cellars are models; the steps leading down to each constructed and finished with long smooth slabs of stone, so that neither rat or mouse can find admittance; and they are so dry, and withal so cool, that vegetables are long preserved in them with their natural taste and flavor: there I saw potatoes of last year, that looked, and at dinner tasted, as well as if newly dug out of the ground.

As for the barns and hay houses, the sheds, the stables, the cutting rooms, with the apartments for keeping straw and horse feed, the garner, at present full of wheat, and rye, and corn, and oats, I pretend not either to describe their dimensions, or count their number.

Thus fixed and circumstanced, Mr. Linn need not covet any location in the *Great West*. Neither there, nor any where else, can he expect to rejoice more in the fruits of his own successful labours, or enjoy a greater variety and abundance of good things than he has (and long may he enjoy them) on his present farm.

A STRANGER.

EXTIRPATION OF GARLIC.

A gentleman in Virginia, having inquired of us the best method of extirpating *garlic*, we have taken the pains to collect together a few brief abstracts of the methods of various farmers, as communicated from time to time, for the *American Farmer*, of which this paper is the successor.

Dr. Thomas E. Bond's mode.

"The process consists, simply, in three successive fall ploughings, winter fallows, and spring crops, as follows:—

The first fall ploughing to be succeeded by a crop of Indian corn: after the corn is gathered the ground to be ploughed and sown with oats the succeeding spring. The common weeds and stubble which are left after the oats are gathered, to be carefully ploughed down in the fall, and the ground again sown on the succeeding spring with oats and clover seed; or the clover seed may be reserved, and the ground may be appropriated after the second oat crop, to be a wheat or rye crop."—*American Farmer*, Vol. 1, p. 320.

Sylvanus, in the same volume, page 350, recommends "A ploughing in November or December, and a spring crop of oats or barley; a ploughing in September or October, and a crop of rye, and the following season a crop of wheat with top dressing, and clover in the Spring."

C. K., a correspondent, vol. 2, p. 6, says:—"Garlic, if turned up by the plough, so as to be exposed without cover, the winter's frost will cause it to become a watery mass, covered by the outer root or skin, and will not vegetate; but I make no doubt many will lay safe under the mould and vegetate again. But a spring ploughing for either oats or barley, and then to prepare the same ground for wheat, effectually prevents it seeding amongst the wheat."

Crasinus, another correspondent, p. 382, vol. 5, says:—"My mode is to attack this pest in its strong-hold, and I have destroyed its bulbs by millions and tens of millions in the soil. My in-

struments were simply the plough-share, the roller and the harrow. My method of using them as follows:—Into the field intended to be laid down in wheat the following autumn, I put my plough, in December, January, or the first half of February, according to the weather and convenience. The flushing or turning up was done, so as to disturb and turn topsy-turvy all the bulbs of garlic, and to expose them as much as possible. To be sure of this, the ploughing was done a fraction deeper (but not more) than the ground had been usually ploughed before.

In April the field was cross ploughed the same depth, rolled and well harrowed. It has been during this harrowing, that I have particularly observed the effects of my method. I have followed the harrow and examined bunch after bunch of the garlic. The main bulbs appeared very much wasted, and in a very unthriving condition. The offset bulbs in every stage of evident decay. Many not only dead, but easily reducible to powder by the rubbing pressure of the thumb and finger. The field was again cross ploughed, and harrowed in June. At this cultivation a great majority of the offset bulbs, which had existed, could not be found, and most of the others were lifeless. Many of the main bulbs were alive, but did not recover so as to produce seed tops in the crop of wheat. The field was again ploughed and harrowed in August and September, and in October was seeded in wheat, and the wheat ploughed in. The spring after this crop of wheat was harvested, the field was again broke up and put into Indian corn, and of course, was well cultivated through this season. In October wheat was seeded among the corn."

H. Hollingsworth, Esq. *Head of Elk*, vol. 12, p. 401.

"1st. Plough in the fall preparatory to planting corn—plough and harrow the same ground in the spring before planting the corn.

2d. In the following spring plough and harrow the same ground, and then sow it with oats—thickly.

3d. Turn under the oat stubble immediately after harvest, and in the fall plough and harrow the field again, and then sow it with wheat.

4th. Upon this wheat, sow at the usual time, clover seed *very thick*.

5th. In the fall thereafter, plough under the second crop of clover, and sow the field with wheat.

A writer in the *Maine Farmer*, states, that if long manure be applied in considerable quantity to land where wheat is sown, that it has a tendency to make it grow too rapidly and to force the sap out, so as to impoverish and shrivel the kernel. He therefore thinks that the proper manure is either lime or a crop of clover ploughed in. By the use of lime in England, he asserts that the wheat crop has been increased in quantity within fifteen years from 30 to 40 per cent.

With regard to the effect of an over quantity of animal or long manure, in adding to the straw, deteriorating the quality, and subtracting from the amount of grain, all experience confirm the facts

stated; and we do not in the least question the efficacy of either a clover lay, or of lime, upon the yield of the golden crop; nor do we doubt the per centum of increase assumed to have been arrived at in England; for we hold it that almost any soil, to which this fructifying mineral is suited, and there are but few that it is not, which may be in an exhausted state, that may not, by a proper course of tillage and a free use of it, be made to average an increase even greater than that named: we think we would be safe in affirming that, under a favorable concurrence of circumstances, it would even reach a hundred per centum. And whilst on this subject, we may as well annex the following communication, which we copy from the *Poughkeepsie Telegraph*—It is from the pen of a New York farmer, and coming as it does from a practical man, is entitled to the more credit:

Messrs. Editors—In my daily labors I have often been thinking, whether ways and means could be devised to improve our farms, and consequently diminish the labor and increase the profits. When I recall to my mind the mode of cultivation which has been pursued ten or fifteen years since, I find that much has already been done in the improvement of our lands; but hitherto our improvements have advanced but slowly. The intelligent and enterprising farmer does now begin to see that all the money which he spends to enrich his fields, is not thrown away, but brings him, in a year or two, fifty per centum profit.

Clover and Plaster is undoubtedly a very cheap manure; and if these useful articles had not been introduced among us, our farms would at present be of very little worth. However it is my opinion that our lands can still be improved, so that the acre will at least yield one third more. And I think the application of *Lime* is the only means through which we can accomplish this desirable end. I perceive in East Pennsylvania, where the land has for a length of time been cultivated, much lime is used to very great advantage. I was induced to make the experiment on a small scale, and I am happy to say that my expectations have been fully realized. Twenty-five bushels I sowed on an acre. I harrowed it in with my wheat, but I could perceive very little difference in consequence of its application. However, the following year I perceived that the clover, which I sowed with the wheat, had a better color, was larger and endured the drought much better, than where the lime had not been applied. Last spring I ploughed up the sod and planted corn in it; and, after it was half grown, I could, even from a distance, see where lime had been used. The stocks and leaves were larger and of a very dark green color, and in the fall I realized at least one third more from that little spot of ground, than I would have done, if no lime had been applied.

W. J. E.

[Fifty or a hundred bushels to the acre may be used with the happiest effects—the former quantity on sandy or gravelly loam, the latter on cold tenacious clayey soils.—*Ed. F. & G.*]

SHEEP HUSBANDRY.

Mr. Roberts,

Sir:—Being unused to appear before the public, it is natural that I should feel some delicacy when I attempt to answer the questions you have propounded; but as you assure me that my ideas will be useful, at least, to some of your readers, I will venture to communicate the result of my experience. In respect to your first question, whether I believe the sheep husbandry to be profitable, I reply that it is a very profitable business in Maine. With regard to pasturing them on worn-out lands, I answer—they will greatly enrich such lands, and destroy most of the noxious weeds and bushes which may come in their way; and to these generally succeeds a rank growth of white clover. Such weeds as the sheep will not destroy, they crop the herbage close about the roots of, so that they may be handily cut with a scythe or dug up with a hoe. I believe all herbs of a bitter or aromatic taste, are eaten with avidity by sheep, and are generally soon cleaned from the ground. The *brake* and *thistle* are noxious plants which sheep will not eat till they are cut and wilted; but they may be broken down and checked in their growth by a little care in salting the flock on the spots infested. I have known land which was so worn out and weedy, that it would not produce a crop worth harvesting, so completely renovated as to yield abundant crops of corn, wheat, or grass. The time necessary to pasture the land will vary from three to six years, according to the state it is in when appropriated to this use, and other circumstances. This may be thought a slow way of manuring land, but let the farmer remember that it costs him nothing; but on the contrary, yields him a handsome profit all the while. Unless the ground to be pastured is already in grass, it should be sowed with red clover or timothy, and some rye would doubtless be beneficial, as it would come forward sooner than the grasses.

I have had but little acquaintance with any particular breed of sheep in its pure state; our sheep are mostly a mixture of the Merino and Saxon, with the English or common sheep first introduced into the country; so we have almost every grade of wool from the coarsest to the finest. I think the nearer they approach the merino, the more weighty* and valuable fleece, but the ewes are less sure to raise their lambs, and are considered less valuable for mutton, but I think the merinoes are the most profitable sheep.

A good flock of sheep grade $\frac{3}{4}$, merino $\frac{1}{2}$ ewes, $\frac{1}{2}$ wethers, $\frac{1}{4}$ of which are yearlings, well washed, should average about $3\frac{1}{2}$ pounds per head.

I have endeavored to answer your questions according to the best of my knowledge; if any farmer doubts the veracity of my statements he can try for himself.

I am aware that a flock of sheep by judicious management may be improved to almost any degree, but so many wiser heads and abler pens than mine have been employed to point out the necessary steps, I think it unnecessary for me to say any thing on that subject.

LEWIS ARMSTRONG.

[*The neighbors of our friend from Maine, cannot yet have had any of the Bakewell or Southdown's introduced among them, or he would not talk of the merinoes imparting weighty fleeces to the respective grade sheep.]

[From the New England Farmer.]

CULTIVATION OF CORN.

Princeton, N. J., Jan. 28, 1833.

Mr. Editor:—The idea has often occurred to me, while perusing your valuable paper, that farmers might be mutually benefitted by making public through its columns their mode of cultivating the various crops which they grow upon their farms. Under that impression I have taken up my pen with the intention of devoting an evening in giving you my views and practice in cultivating a crop of Indian corn. Our soil, principally a sandy loam, a clay subsoil, is well adapted to the growth of that plant, and we consider it the most profitable crop we cultivate. In the first place we prefer a stiff herds-grass sward, (by you called red-top, or herds-grass,) and clover; and, experience has taught us that a field which has been pastured for two or three years is much more certain of producing a good crop of corn than one of the same quality which has been kept up and mowed for hay the same length of time; that it is so with us, does not admit of a doubt. We suppose it is owing in part to there being fewer insects in the pasture-land,—the droppings of the cattle adding more recent animal manure to the soil, and some suppose that the soil having been rendered more compact by the cattle trampling on it for two or three successive years, facilitates the growth of the young plant by enabling it to push forth its roots more readily, as a certain degree of compactness in the soil appears to be necessary to enable a young plant to send forth its roots with facility, after trying various modes of preparing my land and tending the crop, I have for the last two or three years adopted the following, which appears to me to be the best I have yet practised.

I plough my land in the spring as early as convenient, regulating the depth by the depth of the soil, after ploughing put on a roller drawn by one yoke of oxen and roll lengthwise the furrow, after rolling, harrow twice along the furrow, with a heavy harrow six feet wide with iron teeth well sharpened, drawn by two able horses. Then take a small plough, drawn by either one or two horses, and form the field in ridges, by throwing two furrows together four and a half feet distant from each other across the original furrows, being careful the plough does not reach the sward to turn it up: this cannot be well done without the ground has been previously rolled. I then furrow crosswise the ridges last formed, with a sled made for the purpose of two inch plank with three runners, each runner having a hole an inch in diameter bored in the bottom, about equi-distant from either end, and a peg of good hard wood driven therein to extend about one and a half inches below the runner, the part extending below the runner to be twice the diameter of that inserted in it. With this machine, with a tongue or pole firmly attached to the middle runner, one man with two horses can with ease furrow more than twenty acres per day;—as he makes three furrows at once, he must, consequently, furrow as fast as three men with ploughs, and it leaves the furrow in a fine state to drop corn on, the grain not being so liable to scatter and roll as when dropped on the hard furrow made by a plough. The ground is then prepared for planting squares four and a half feet by four feet, and at this distance we put four

grains or kernels in each hill. We find a small quantity of ashes on, or in the hill of considerable advantage; it causes the young plant to come up strong and vigorous. When the corn has been up a few days, we put a small quantity of plaister to each hill, and commence harrowing with a small harrow three and a half feet wide, drawn by one horse, twice through each row one way, which prepares the ground handsomely for ploughing, and by which a careful hand can loosen the soil close to each hill. In a very few days after the harrowing is completed we commence ploughing, by throwing a furrow from each row, ploughing as close to the corn as can be done without covering it up, leaving the middle or spaces between the furrows in that direction untouched; we then commence ploughing crosswise, throwing the furrow to the corn unless it should be quite grassy, when we throw it from the corn as before, and in either case plough the middle or spaces left between the rows in the direction last ploughed out, immediately, throwing half to each row. After laying in this state some days, we put on the small harrows again and harrow twice through each row or rather space between the rows one way—in this state it may be left for some days untouched, unless there should be a heavy fall of rain, in which case experience has taught me that it is of decided advantage to the corn to stir the ground again with the harrow, that a free communication may be kept up between the soil and the atmosphere. As it is all important to the health of an individual that the pores of the skin should be kept open, so it appears to me with the soil, that the slightest crust formed upon its surface after a rain should be again broken with the harrow or some other implement.

When the ears are beginning to set I commence ploughing for the last time, throwing the furrows to the corn and leaving the spaces between the rows well ploughed out; by this system you will perceive the hoe is in a great measure dispensed with, and I can assure you I can keep my fields as clean without it as you would wish to keep your garden, unless the spring should be very wet and warm, when we occasionally find it necessary to use the hoe. One man and a horse will plough around (as we call it) five acres of corn in a day, or complete, by ploughing the middle out, two and a half acres. If there should be a considerable fall of rain or heavy showers soon after the last ploughing, I almost invariably put on my small harrows again, unless the crop should be too forward, but at the last harrowing we raise the corner teeth of the harrow (which is of a triangular form) so that near the hills they merely break the surface. When the corn is nearly ripe, and, if possible, before it is killed by the frost, we cut it up by the ground and set it in stacks to be husked at leisure; the stalks are hauled and stacked at the barn-yard to be food through the winter months.

I have said nothing on the subject of applying manure to the crop, having already extended this communication to a much greater length than I intended when I commenced, and I fear it will occupy more space in your columns than it merits, but I leave it with you to publish the whole or any part thereof that you may consider calculated to promote the cause of agriculture. A. C.

VALUABLE AGRICULTURAL SCRAPS.

Salting Hay.—In conversation with a farmer of West Chester county, he informed us that he makes it a practice to salt all his hay when he puts it into his barn. He finds numerous advantages from the practice. Stock eat it more freely, waste less, and thrive better. It can be secured in finer order, and it keeps longer; does not become so dry and dusty as unsalted hay. He also considers it a preventive of many diseases. One season, a considerable portion of his hay was obtained from low wet ground, where it grew coarse. The remainder was of very superior quality—so much so, that he deemed salting unnecessary. The coarse hay had a liberal quantity of salt put on to every layer, as it was mowed away in the barn. In winter he was surprised to find his horses and cattle give this coarse salted hay the preference.—*N. Y. Farmer.*

Potatoes.—Experiments with Potatoes have been carried on with great care in the Horticultural Society's garden, for some years past, and the results given in two papers by Dr Lindley, the last of which is just published in part vi. of the *Hort. Trans.*, vol. i., second series. From this paper it appears that the opinion entertained by Mr. Knight, and a number of other persons, of the superior productions of whole tubes over sets, is unfounded. The same result, it is stated, has also been arrived at by Sir George Mackenzie, from experiments made by him at Rosshire. Other instances will be found in our First Additional Supplement to our *Encyclopedia of Agriculture*, just published.—*Loudon's Magazine.*

Cutting down Woods.—Large quantities of wood are brought to this city from Long Island. The owners of woodland have adopted the plan of cutting every 15 or 20 years. Six or eight years is too frequent—10 to 15 may be the most profitable.—*N. Y. Farmer.*

An experienced agriculturist informs us that he considers it an established fact, that the same forest land which produces sixty cords of wood per acre, when cut once in twenty years, would produce ninety cords, if the wood were cut three times during the same period. He thinks that the rapidity of the growth of wood depends much upon the frequency of cutting; and that woodland in general would yield a far greater profit, if cleared as often as once in six or eight years.—*Dedham Advertiser.*

Perennial Rye Grass.—By T. S. P.—Last spring I procured a small quantity of the seed of the Perennial Rye Grass, and sowed them in my garden. My object was to ascertain whether it was adapted to our climate; and how far, from the smallness of the experiment, it might prove an acquisition in our rural management. The seed came up well, but during the heat and drought of summer, some of the plants perished. The grass made but an indifferent appearance, until the rains commenced in the fall; after which it put forth rapidly, and has exhibited a most luxuriant growth ever since. Even at this time, though the thermometer has been as low as ten degrees, and the season generally quite cold, the blades are perfectly green, not showing the slightest appearance of hav-

ing been nipped by the frost. It is decidedly the most beautiful grass I have ever seen, except perhaps the English grass or greensward, which it closely resembles in the length and glossiness of its spears. The bunches are large and the blades very long. Encouraged by the flattering result of this trial, I have purchased a few bushels for the purpose of sowing a lot; and I think I may confidently recommend others to do the same. There can be no doubt of its being well adapted to the soil and climate of New York, judging from the hardness with which it resists the cold. The quantity of herbage afforded by the Rye grass, appears so far, to exceed considerably that of orchard grass, Timothy, or the tall Oat grass [*Avena elatior*], all of which, particularly the last, I have cultivated to some extent.—*Beaverdam, Va., 1 mo. 1st.*

Pale or Picket Fence.—By Percey.—One way of making this kind of fence is, to nail both the rails on the face of the posts. This is the *weakest* manner in which you can build it. Another way is, to frame the lower rail into the posts, and nail the upper one on the top of the posts. The objections to this are, the difficulty of repairs when they are needed, and the liability to decay occasioned by the retention of water in the mortises. This is a stronger but more expensive way than the one first mentioned.

Another way is this:—If your fence faces the quarter from which the strongest winds usually blow, set the posts with the tops leaning an inch and a half over the bottoms—nail the lower rail on the face of the posts and the upper rail on the top even with the face edge of the post. You will find that in putting on the pales, they will stand perpendicular—the thickness of the lower rail being equal to the projection of the top of the post. The reasons in favor of this way are—First, the posts are braced against the wind. Second, one rail being placed edgewise, it is the strongest way you can build it, because the pressure against the fence must come against that part of the rail most capable of bearing resistance. Thirdly, it looks well, because the tops of the posts being sawed off to receive the top rail, nothing is seen but the pales. There is no difficulty in setting the posts, for if you see a plumb line it is as easy to slant them exactly one and a half or two inches as it is to set them perpendicular. The paling is sharpened with an axe, and then nailed on by a top line. The distance of the pales from each other, and the nature of the ground, will determine the necessity of a bottom board.—*A—, Jan. 16, 1835.*

THE CULTIVATOR, OR HORSE HOE.

This is an instrument not as much known and used as it deserves and ought to be. It is adapted for operations between the plough and harrow, and at certain times is much better than either.—It is half a plough, half harrow and half hoe, and does all these operations conjointly. The first process, after corn has come up and is three or four inches high, is to use the common harrow upon it. This breaks the ground and partially clears it of the weeds or grass. It is soon performed and is very useful to the young plant.—The next step has been to pass the plough twice through each furrow, throwing the ground from

the corn to the centre of the furrow. It ought, after a few days, to follow the harrow, and is much more useful than the plough as well as a great saving of labor, because it is necessary to go only once between the rows of corn. It cuts as deep as the corn plough and pulverizes the soil much better. It tears up and brings to the surface the roots of grass which the plough only covers, and by adapting the width of the cultivator to the space between the rows of corn, it half hoes the corn at the same time and does the whole work most admirably. When there is much grass growing with the corn, it is an extremely useful instrument, as it pulls up by the roots and in a great measure destroys it. For the Fiorin or Quack roots, with which our soil too much abounds, it will be of great service, and it appears to me it will be the most effectual remedy for it of any instrument we have yet tried. It is much sooner dressed with the hand hoe, by the half ploughing, half hoeing operation of the cultivator, when it has preceded it. The cultivator is likewise very useful for the raising of potatoes, and for ploughing between the rows of turnips, and where a clover lay has been turned over to put down to wheat, when the plough cannot again be resorted to for fear of disturbing the sod—this instrument may be used for a shallow ploughing, which it will do much better than can by any other mode be effected. Corn is now raised with much less labor than formerly. It was the custom to hand hoe a crop two and often three times, and this was always an expensive and tedious process. Hoeing is now often omitted entirely, and is seldom done more than once, and still there are heavier crops of corn raised now than formerly. The process of high hilling is not only not necessary, but in a measure injurious, and our premium crops of corn have been raised with little hoeing and of course at the least expense.—The idea that corn well grown will blow over by the high winds without the ground is well raised at the foot of each hill, is erroneous. Providence has given to every plant sufficient roots and strength of stem to secure it against accidents of this kind, and we may aid the extension and multiplication of the roots best, and thus add to its security, if necessary, by stirring the ground, which will enable the roots to penetrate it readily in every direction. High hilling to potatoes is positively injurious. It not only turns away the rains from the plant, but by raising a mound around them, prevents the sun and air from having that influence in aiding their growth and bearing, which are both essential to the insurance of a good crop.—*Columbia Sent.*

TIME FOR PAINTING HOUSES.—The Genesee Farmer says, that repeated experiments show that paint put on houses late in autumn, or in winter, will last far longer than that put on in warm weather. In cold weather the oil dries on the clapboards, and with other ingredients forms a durable body; but in hot weather the boards absorb the oil, and what remains on the surface has but little substance.

The white mulberry besides its admirable quality of affording food for silk worms, is said to furnish a wood as durable for posts as the best locust or cedar.

[From Transactions of the Essex Agricultural Society.]

ON COLORING.

The art of fixing on cloths beautiful colors, although not one of the most necessary, has been made by the fashions, taste, and pride of men, in all ages and nations, one of the most valued of inventions. It is altogether a chemical art. Its theory is now well understood, and is in a high degree interesting to every studious mind, useful to all engaged in manufacturing, or in buying, selling, or consuming colored fabrics. It is, therefore, worthy the attention of all our readers.

Colors, to be permanent, must be combined with the fibres of the silk, wool, cotton, or linen, of which the cloth is composed. To understand how this can be effected, we must acquaint ourselves with the laws of chemical affinity. Affinity is nothing more than the disposition or tendency which two or more substances have to unite and form a new compound, differing greatly in some of its qualities from the simple substances of which it is composed; one substance is therefore said to have an affinity for another when, on being brought in contact, it unites with and assumes new appearances and qualities. For example, if iron and sulphuric acid (oil of vitriol) be brought together, they gradually unite and form sulphate of iron (green vitriol or copperas), but the sulphuric acid has a stronger affinity for lime than it has for iron; if, therefore, lime be brought into contact with sulphate of iron, the sulphuric acid quits the iron, seizes on the lime, and forms sulphate of lime (plaster of Paris). Substances used in dyeing possess an affinity for the fibres of the cloth, and when dissolved in water or some other liquid, and brought into contact, they unite, and change either the color of the fibres, or so change their qualities, as to dispose them to unite with other coloring matter for which before they had no affinity.

The art of dyeing, then, consists in combining a certain coloring matter with the fibres of the cloth. This process cannot be well performed unless the dye-stuff be dissolved in some liquid, and the particles so separated that their attraction for each other becomes weaker than the attraction for them exerted by the cloth. When the cloth is dipped into this solution, it attracts the coloring matter, and from its stronger affinity takes it from the solvent and fixes it upon itself. The facility with which cloth imbibes a dye, depends on two circumstances, namely, the affinity between the cloth and the dye-stuff, and the affinity between the dye-stuff and its solvent. It is of importance to preserve a due proportion between these two affinities, as upon that proportion much of the accuracy of dyeing depends. If the affinity between the coloring matter and the cloth be too great, compared with the affinity between the coloring matter and the solvent, the cloth will take the dye too rapidly, and it will be scarcely possible to prevent its color from being unequal. On the other hand, if the affinity between the coloring matter and the solvent be too great, compared with that between the coloring matter and the cloth, it will either not take the color at all, or take it very faintly. Wool has the strongest affinity for most coloring matter, silk the next strongest, cotton a much weaker affinity, and linen the weakest of all. In order, therefore, to dye cotton

or linen, the dye-stuff should, in many cases, be dissolved in a liquid for which it has a weaker affinity than for the solvent employed in dyeing wool or silk. Thus we may use iron dissolved in sulphuric acid to dye wool, but for cotton and linen it is better dissolved in vinegar. Was it possible to obtain a sufficient variety of coloring matters having a strong affinity for cloth, the art of dyeing would be exceedingly simple and easy. But this is by no means the case; if we except indigo, the dyer, is scarcely possessed of a dye-stuff which yields of itself a good color, sufficiently permanent to deserve the name of a dye. To obviate this difficulty, some substance must be employed which has a strong affinity both for the cloth and the coloring matter. Substances employed for this purpose are called mordants—Those chiefly used are earth, or metal, in the form of salts or in solution, tan, and oil. One of the most frequently used is *alum*. This salt is composed of pure clay (alumina) dissolved in sulphuric acid. Into a solution of alum the cloth is dipped, the fibre of the cloth having a stronger affinity for the clay than the sulphuric acid has, unites permanently with it. It is then taken out, washed and dried, and will be found a good deal heavier than before, although the color remains the same, the clay, which now forms a part of it, being perfectly white. The cloth may now be dyed by dipping it in a solution of any coloring matter for which the clay has a strong affinity.—The clay and coloring may be united previous to the immersion of the cloth, and the fibres will still unite themselves with the compound, but not so equally and permanently as when dipped into each of the solutions separately. But the sulphuric acid has rather too strong an affinity for the clay to yield it readily even to wool. Most dyers, therefore, add to the solution of alum a quantity of tartar. Tartar is composed of potash and an acid found in grapes and some other vegetables, called tartaric acid. When solutions of alum and tartar are mixed, the sulphuric acid quits the clay and seizes on the potash, dislodging at the same time the tartaric acid, which seizes in turn on the clay just abandoned by the sulphuric acid. The tartaric acid, having a weaker affinity for the clay than the sulphuric acid possesses, yields it more readily to the cloth. Another purpose is also gained: the sulphuric acid remains combined with the potash, and this corrosive substance is thereby prevented from injuring the texture of the cloth. For cotton and linen, which have a weaker affinity to clay than wool or silk, another process becomes necessary. Lead or lime dissolved in acetic acid (vinegar) is poured into the solution of alum. A solution of sugar of lead is frequently used. The sulphuric acid quits the clay and seizes on the lead or lime, both of which, united with this acid, form insoluble powders, which fall to the bottom, and the acetic acid unites with the clay, for which it possesses only a weak affinity, and readily yields it to the cotton or linen immersed in it.

Metallic salts may also be used as mordants.—Those of iron and tin are extensively used in dyeing. Iron is used as a mordant in two states, in that of sulphate of iron, (copperas,) or acetate of iron, that is, iron dissolved in vinegar or in the acid obtained by distilling wood (pyrolygneous acid.)

Tin is used as a mordant in three states—dissolved into nitro-muriatic acid, (a mixture of the acids obtained from saltpetre and from common salt,) in acetous acid, and in a mixture of sulphuric and muriatic acids. The nitro-muriate of tin is the common mordant employed by dyers. It is prepared in the following manner: melt block tin and pour it into water briskly agitated with a bundle of small rods, take of this granulated tin 2 oz., nitric acid 1 lb., water $\frac{1}{2}$ lb., common salt or sal ammoniac 2 oz., mix them together in a glass vessel, and the tin will be slowly dissolved.* When nitro-muriate of tin is to be used as a mordant, it is dissolved in a large quantity of water, and the cloth is dipped in the solution until sufficiently saturated. It is then taken out, washed, and dried. Tartar is usually dissolved in the water along with the nitro, muriate of tin. This changes the compound into a solution of the tartrate of tin and nitro-muriate of potash. The tartrate of tin is again decomposed by the cloth. The metal quits the acid and attaches itself to the fibres of the cloth, and in this state possesses a strong affinity for coloring matters, and forms with them the most permanent and brilliant dyes.

Tan is also employed, along with other mordants. It is found in nutgalls, oak and hemlock barks, sumach, and in a great variety of other vegetables. It is that part of barks, &c. which has a strong affinity for glue, of which hides are chiefly composed, unites with it and forms leather. It has a strong affinity also for cloth and for several coloring matters. Silk is capable of absorbing a very great proportion of tan, and thereby acquires great increase of weight. For this purpose alone it is sometimes employed by silk manufactures.—Tan is often employed, also, along with other mordants, in order to produce a compound mordant. Oil is also used for the same purpose, in dyeing cotton and linen.

Besides these mordants there are several other substances frequently used as auxiliaries, either to facilitate the combination of mordant with the cloth, or to alter the shade of color; the chief of these are tartar, sugar of lead, common salt, sal ammoniac, sulphate of copper, (blue vitriol,) acetate of copper, &c.

Mordants not only render the dye permanent, but have also considerable influence on the color produced. The same coloring matter produces very different dyes, according as the mordant is changed. Cochineal, with salts of iron, produces black,—with the salts of tin, scarlet,—and with alum, crimson. In dyeing, then, it is not only necessary to procure a mordant which has a sufficiently strong affinity for the coloring matter and the cloth, and a coloring matter which possesses the wished-for color in perfection, but we must procure a mordant and a coloring matter which, when combined together, shall produce the wished-for color in perfection.

The colors denominated by dyers simple, because they are the foundation of all their other processes, are four, viz. blue, yellow, red, and black. A few simple directions for dyeing wool, silk and cotton of these colors will now be given. We write for prudent and economical housewives, silk culturists, and agricultural manufacturers, and the means within the reach of such must therefore be kept continually in view, in all the operations recommended.

Blue.—Indigo is the only substance that can be economically used in families for coloring blue. The best or purest indigo is light, easily powdered, tasteless, almost destitute of smell, and breaks smoothly, that is, with smooth surfaces. Some will float on water, and this is generally the purest. The color of indigo also varies. There is the blue, the violet, and copper colored. Although these may all contain nearly the same quantity of coloring matter, yet they are differently valued, the blue selling 20 per cent. higher than the violet, and from 40 to 80 per cent. more than the copper colored. The blue is preferred by dyers for combination, or solution in sulphuric acid, and the copper colored for the indigo vat, aided by bran, madder, or other vegetable products, in a state of fermentation. Before indigo can be applied and fixed upon the fibre of cloth, it must be dissolved in water in its blue state; it must be converted to a green or yellow color, and then it readily dissolves, is attracted by the fibres of the cloth, becomes permanently combined with them, and on being exposed to the air becomes again blue. In the solution of the indigo, therefore, consists the whole art of coloring blue. The following are among the most easy and simple methods of dissolving indigo, or, in other words, forming a blue dye.

First method.—Take indigo, well powdered, one ounce; quick lime, one ounce; potash, two ounces; copperas, two ounces; molasses, half a pint; warm water, one gallon. Mix, and stir occasionally, keeping the vessel, of copper, iron, or earthen, well covered and in a warm place. The liquor will soon become green, covered with a copper colored scum. In twenty-four hours it will be fit for use. Immerse the stuff to be colored for a longer or shorter time, according to the shade required. The strength of the color may also be varied by using a greater or less quantity of water. A very little practice will enable any one to give wool silk, or cotton properly prepared, with this dye, a beautiful and permanent blue, of any shade they may choose.

Second method.—**Saxon Blue.**—In this method, the indigo is dissolved by the aid of sulphuric acid, without losing its blue color, but it undergoes a change which renders it less permanent, and is therefore not much used, except for articles not very durable, or when a deep, unfading tint is not considered of much importance. This preparation is kept in the shops, under the name of *Liquid Blue*, or *Chemical Blue*, and is much used for blueing white cotton and linen garments, from which it is readily washed out, even in cold water. It is also extensively used in coloring greens, giving, with yellow, a more brilliant color than the blue obtained by the first method.—On wool and silk it is much more durable than on cotton, and on articles which do not require frequent washing, may be often used advantageously as a blue dye. It is prepared as follows:

Take indigo, well powdered, one ounce; sulphuric acid, four ounces—mix it in a glass or stone ware vessel, and let it stand twenty-four hours, stirring it occasionally—then add one ounce of dried potash. Let it stand twenty-four hours longer, and half a pint of water, and bottle it up, for use.

Mix a wine glass full of this liquid in a pail full of boiling water, and dip the stuffs till they ac-

quire the color desired. More of the liquid must be added when the water becomes nearly clear, before the stuffs have acquired a color sufficiently deep.

(to be continued.)

* When common salt, which is composed of muriatic acid and soda, or sal amoniac, composed of the same acid and ammonia, is mixed with diluted nitric acid, a part of the nitric acid seizes on the soda or ammonia, and sets at liberty a part of the muriatic acid, forms nitro-muriatic acid, (aqua regia,) which readily dissolves tin, gold, &c. It is more economical, however, to add sulphuric acid enough to saturate the base of the salt, which sets all the muriatic acid at liberty, and leaves the nitric acid undiminished.

FOREIGN ABSTRACT.

An arrival from Liverpool brings dates to the 16th June, from that city and from London of the preceding day.

The Liverpool cotton market declined a little on the 15th, since then the inquiry has been limited. Brazil difficult of sale. Better qualities of American being scarce, maintains their price—upland 10 to 13½d. Alabama 10 to 13½d. New Orleans, 10 to 15d.

June 15.—Cotton market steady—fair demand no alteration in prices. Sales 3000 bales.

The municipal reform bill was to have been read a second time, June 15, and it was supposed there would be no opposition as Sir Robert Peel had made great concessions to the utter dismay of the ultra Tories.

The tory members from Ipswich had been deprived of their seats in parliament on the ground of bribery being used in their elections.

The Bey of Tunis died on the 20th May.

The wheat crops of Ireland promise a luxuriant yield.

The queen of Portugal is about to dry up her widowed-tears by espousing Prince Maximilian, the brother of her late husband. A reorganization of the Portuguese cabinet has been concluded, with Saldanha at its head.

The affairs of the queen of Spain are rather in an adverse situation; her troops have been compelled to retire from several strong holds; but from the movements of the powers of England, France and Portugal, in her favor, we suspect the career of Don Carlos in Spain will be shortly arrested. The act prohibiting enlistments for foreign service in England has been suspended for two years, and measures for the Spanish expedition from England are proceeding with great activity. Some large steamboats have been contracted to convey troops from Ireland to Spain.—Admiral Napier and Col. Robinson are said to have volunteered to go in the expedition. Also, Gen. Bacon, and positively Col. Evans, member of parliament, who has given public notice of the same.

DOMESTIC SUMMARY.

The mill site property of Daniel W. Coxe, in the vicinity of Trenton, New Jersey, recently sold to a company of gentlemen from New York, for \$50,000.

The number of visitors at the White Sulphur

Springs was upwards of 300 on the 10th instant.

Horace Binney, Esquire, of Philadelphia has been nominated by the councils of that city, and accepted the appointment, to pronounce an eulogium on John Marshall, late Chief Justice of the United States,

The amount paid into the treasury of Pennsylvania for canal tolls from Nov. 1834 to July 14 1835, was \$361,429,88—\$200,000 more than was received during the corresponding season of last year.

Difficulties of a serious character have recently occurred between the Indians residing in Georgia, and the white inhabitants residing on what is claimed as the Indian territory.

The navigation of the Wabash and Erie Canal was formerly opened on the 4th instant, on which occasion the good citizens of Fort Wayne had a celebration. A letter in the National Intelligencer states that, thirty-two miles of the summit section, connecting the keel boat navigation of the Wabash and Maumee rivers are now in good order, and that boats are passing thereon daily. It is also well remarked, as a fact worthy of notice, that the country through which these canal boats are now passing daily, to and fro, was purchased of the Indians only eight or nine years ago. It is believed that an instance of such rapid improvement is no where else to be found.

The rail road from Baltimore to Washington is now open for travel as far as Bladensburg, and the passage from this city to that point has been made in an hour and forty minutes. The next congress will, we presume, be well attended by auditors from this city, on all occasions when important debates may be on the tapis. We shall be able to leave here at 10 o'clock, A. M., be at Washington on the opening of the houses of congress, attend to the debates three hours, dine there, and be at home again by 7 o'clock P. M., toasting our shins before a good hickory fire and sipping our tea.

Captain Read, of the United States Navy, has been suspended from command for one year for his treatment towards midshipman Wilson.

The court at Richmond we learn have decided in favor of the will made by the late John Randolph in 1832, which gives the major part of his estate to Mr. Bryan, the husband of his niece. This, of course will put the question of the freedom of his slaves to rest, should the Appellate of the state, to which an appeal has been taken, to confirm this decision.

CONTENTS OF THIS NUMBER.

The Crops—Silk reeling and making by a lady—admonition to plant turnips—large Beet and Tomatoes—a mammoth Strawberry—cause of the failure of root crops in drills—broad cast corn and millet—large German geese—medical virtues of yarrow—notice of Lane's endless chain horse power, and thrashing machine—notice of a chapter on dyeing—notice of Mr. Linn's farm in the valley of Va.—extirpation of garlic—injurious effects of too much long manure to a wheat crop, and the value of lime—Mr. Lewis Armstrong on the effects of sheep Husbandry, to restore worn-out land—corn cultivation—salting hay—experiments on potatoes—best mode of cutting down woods—value of the Perennial rye grass—picket fence—notice of the superior uses of the cultivator—the proper time for painting houses—great value of the white mulberry—chapter on dyeing—foreign abstract—domestic summary—prices current, &c. advertisements—terms of the paper.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,.....	bushel.	2 50	
CATTLE, on the hoof,.....	100lbs	5 50	6 50
CORN, yellow,.....	bushel.	94	95 96
White,.....	"	94	95
COTTON, Virginia,.....	pound.	17½	18
North Carolina,.....	"		
Upland,.....	"	18½	19½
FEATHERS,.....	pound.	37	40
FLAXSEED,.....	bushel.	1 25	1 37½
FLOUR & MEAL—Best wh. wh't fam.	barrel.	8 00	8 50
Do. do. baker's,.....	"	7 50	8 00
Do. do. Superfine,.....	"	6 75	7 25
Super Howard street,.....	"		7 00
" wagon price,.....	"		6 75
City Mills, extra,.....	"		
Do.	"	6 75	7 00
Susquehanna,.....	"	Sales	6 78
Rye,.....	"	5 00	5 12
Kiln-dried Meal, in hhds.	hhd.	20 00	
do. in bbls.	bbl.	4 37	4 50
GRASS SEEDS, red Clover,.....	bushel.	5 00	5 25
Timothy (herds of the north)	"	2 50	3 00
Orchard,.....	"	none	
Tall meadow Oat,.....	"	2 00	2 50
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.	18 00	20 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	8
Hogs, on the hoof,.....	100lb.	6 25	6 50
Slaughtered,.....	"		
Hops—first sort,.....	pound.	12	
second,.....	"	10	
refuse,.....	"	8	
LIME,.....	bushel.	33	35
MUSTARD SEED, Domestic,.....	"	5 00	6 00
OATS,.....	"	50	53
PEAS, red eye,.....	bushel.		
Black eye,.....	"		1 25
Lady,.....	"		
PLASTER PARIS, in the stone,.....	ton.		3 12
Ground,.....	barrel.	1 37	
PALMA CHRISTA BEAN,.....	bushel.	2 00	
RAGS,.....	pound.	3	4
RYE,.....	bushel.	90	
Susquehanna,.....	"	92	
TOBACCO, crop, common,.....	100 lbs	4 00	5 00
" brown and red,.....	"	5 00	7 00
" fine red,.....	"	7 00	9 00
" wrappery, suitable	"		
for segars,.....	"	6 00	12 00
" yellow and red,.....	"	8 00	12 00
" yellow,.....	"	9 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality,.....	"	4 00	5 00
" ground leaf,.....	"	5 00	9 00
Virginia,.....	"	5 00	10 00
Rappahannock,.....	"		
Kentucky,.....	"	6 00	9 00
WHEAT, white,.....	bushel.	1 50	1 60
Red,.....	"	1 40	1 45
WHISKEY, 1st pf. in bbls.....	gallon.	37	37½
" in hhds.....	"	36½	37
" wagon price,.....	"	33	33½
WAGON FREIGHTS, to Pittsburgh,.....	100 lbs	1 50	
To Wheeling,.....	"	1 75	
Wool, Prime & Saxon Fleeces,.....	pound.	62 to 75	30 to 32
Full Merino,.....	"	52 62 28	30
Three fourths Merino,.....	"	45 52 26	28
One half do.....	"	40 45 23	26
Common & one fourth Meri.	"	35 40 24	25
Pulled,.....	"	38 40 25	27

VALUABLE STOCK FOR SALE.

A FULL-BRED Durham short horn yearling BULL, a very superior animal; a 7-8 blood, same age; also two COWS, 4 years old, 3-4 blood, in calf by a full-bred Bull. Pedigrees given in full. Applications for any of the above cattle to be made to the Editor of the Farmer and Gardener, by whom the terms will be made known.

Letters from a distance must be post paid.
June 30th.

BALTIMORE PROVISION MARKET.

	PER.	FROM	TO
APPLES,.....	barrel.		
BACON, hams, new, Balt. cured....	pound.	11	11½
Shoulders,.... do.....	"	10	10½
Middlings,.... do.....	"	10	10½
Assorted, country,.....	"	9	10
BUTTER, printed, in lbs. & half lbs.	"	18½	25
Roll,.....	"		
CIDER,.....	barrel.		
CALVES, three to six weeks old....	each.	3 00	6 00
Cows, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	2 00	2 06
CHOP RYE,.....	"	1 87	2 00
EGGS,.....	dozen.		
FISH, Shad, No. 1, Susquehanna,.....	barrel.	7 75	
No. 2,.....	"	6 75	
Herrings, salted, No. 1,.....	"	4 37½	4 50
Mackerel, No. 3,.....	"	4 50	4 62
Cod, salted,.....	cwt.	2 25	2 75
LARD,.....	pound.	10	10½

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,.....	par	VIRGINIA.
Branch at Baltimore,....do		Farmers Bank of Virginia, 2a
Other branches,....do		Bank of Virginia,....do
MARYLAND.		Branch at Fredericksburg do
Banks in Baltimore,....par		Petersburg,.....do
Hagerstown,....do	1a	Norfolk,.....do
Frederick,.....do	1a	Winchester,.....do
Westminster,.....do	1a	Lynchburg,.....do
Farmers' Bank of Mary'd, do	1a	Danville,.....do
Do. payable at Easton,....do	1a	Bank of the Valley,....do
Salisbury,.... 5 per ct. dis.	1a	Branch at Romney,....do
Cumberland,.....do	1a	Do. Charlestown,....do
Millington,.....do	1a	Do. Leesburg,....do
DISTRICT.		Wheeling Banks,....do
Washington,....do	1a	Ohio Banks, generally 3a3½
Georgetown, } Banks, 1a		New Jersey Banks gen. 1a2
Alexandria,....do	1a	New York City,....do
PENNSYLVANIA.		New York State,....do
Philadelphia,.....do	1a	Massachusetts,....do
Chambersburg,.....do	1a	Connecticut,....do
Gettysburg,.....do	1a	New Hampshire,....do
Pittsburg,.....do	1a2	Maine,....do
York,.....do	1a	Rhode Island,....do
Other Pennsylvania Bks. 1a2		North Carolina,....do
Delaware [under \$5]....3a4		South Carolina,....do
Do. [over \$5]....2a1		Georgia,....do
Michigan Banks,.....5a		New Orleans,....do
Canadian do.....5a		

FOR SALE,

A TWO years old three-fourths Devon BULL. He is of fine form and medium size—he has been fed as dry cattle usually are. Having no use for him, his price will be very low.

June 9th.

SINCLAIR & MOORE.

DALE'S NEW HYBRID TURNIP.

THE subscriber now offers to the agriculturists a new and decidedly superior variety of Turnip, originated by R. Dale, Esq. an intelligent farmer, near Edinburgh, Scotland; it was obtained by unwearied attention in crossing the Swedish or Ruta Baga Turnip; it is superior in size and flavor to the Ruta Baga; is closer and finer in texture; it is as rapid in its growth as the white Flat Turnip. In fact, it includes the great desideratum in the selection of a proper variety of the Turnip which is to obtain the greatest possible weight at a given expense of manure. This Variety seems to be more adapted to this end than any other sort introduced; it will be found superior in quality to any of the White Field Turnips, and keeps longer than any of them, and very near as long as the Ruta Baga—the color is yellow—the shape oblong. Price 25 cents per ounce. The season for sowing is at hand.

R. SINCLAIR, Jr.

At Sinclair & Moore's Maryland Agricultural Repository.
June 30th.

LUCERNE SEED.

FOR SALE ON PLEASING TERMS,

500 LBS. fine quality LUCERNE or FRENCH CLOVER SEED. This is one of the most valuable grasses which has as yet been introduced into cultivation in our country, and can be recommended as being particularly adapted to the purposes of soiling, as it is fit for the scythe fully two weeks before the common Red Clover, and can be advantageously cut several times in the course of a season. Persons sowing this species of Clover, should also sow with it half a bushel of Rye, or some other grain to the acre, so as to protect it from weeds the first year, or until it attains its wanted strength and becomes sufficiently matted to smother the weeds. The quantity of seed sown to the acre is 18lbs.

ALSO, SCARLET CLOVER, or Trifolium Incarnatum, a very early sort, possessing many advantages.

St. FOIN, and BURNET GRASS seed, both highly spoken of for culture in high, dry soils, as improvers of land—which, together with

RUTA BAGA TURNIP, WHITE FLAT, YELLOW BULLOCK, EARLY DUTCH, and many other sorts, all of the best varieties of Turnip Seeds, for field and garden culture, are confidently recommended as of the very first quality, being selected with great care, and due regard paid to their freshness.

R. SINCLAIR, Jr.

At Seed Store connected with this Office.

June 2.

50 BUSHELS OF BUCKWHEAT, suitable for seed, just received and for sale. Apply to
June 16th. SINCLAIR & MOORE.

MASTIFF PUPS.

FOR SALE, four Mastiff Pups—deliverable at four weeks old—they can be highly recommended for farm or watch dogs, will be very large and extremely fierce—for particulars enquire at the office of Gardener & Farmer, Light-st. near Pratt st.
July 28, 3t*

DEVON COW AND CALF.

FOR sale, a first rate DEVON COW, five years old this spring, of the best blood and most beautiful form. She is altogether one of the most perfect animals of her kind, and is in calf to a first rate Devon Bull. She has also by her side a BULL CALF, two months old, equal in all respects to any other calf of his kind, and age. The price of the two animals is \$200, and they will be delivered in Baltimore. Address

I. I. HITCHCOCK, Philadelphia.

June 9th, 1835.

3t.

TERMS OF THIS PAPER.

1. Price five dollars per annum, payable in advance. When this is done, 50 cents worth of any kind of seeds on hand will be delivered or sent to the order of the subscriber with his receipt.

2. The manner of payment which is preferable to any other for distant subscribers, is by check or draft on some responsible party here, or else by remittance of a current bank note; and to obviate all objection to mail transmission, the conductors assume the risk.

3. Subscriptions are always charged BY THE YEAR, and never for a shorter term. When once sent to a subscriber the paper will not be discontinued (except at the discretion of the publishers) without a special order, on receipt of which, a discontinuance will be entered, to take effect AT THE END of the current year of subscription.

4. Subscribers may receive the work by mail either in weekly numbers, or in monthly or quarterly portions; or else in a volume (ending in May annually), handsomely pressed, half bound and lettered (to match with the American Farmer) by such conveyance as they may direct: but the \$5 must in all these cases be paid in advance.

ADVERTISEMENTS relating to any of the subjects of this paper will be inserted once at one dollar per square, or at that rate for more than a square, and at half that rate for each repetition.

Printed by Sands & Neilson, N. E. corner of Charles and Market streets.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 14.

BALTIMORE, MD. AUGUST 4, 1835.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, AUGUST 4, 1835.

The present number of our paper contains the 4th Essay of the series of Mr. Abednego Robinson, on grasses, and treats of several species of native grasses. We need not call the particular attention of agricultural readers to it, as its interest will challenge that without any remark of ours.

We have received a most valuable communication from an esteemed correspondent, of St. Mary's county, on the subject of the state of agriculture in that and other tobacco growing counties of Maryland, and we regret that, owing to the pre-engagement of our columns, we cannot give it in this number. It is replete with valuable information, sound discriminating judgment, and wholesome suggestions—and what adds to their value, they are expressed with that perspicuity, grasp of thought, and familiar knowledge of the subjects touched, which carry conviction home. We shall give it in our next, and hope we shall often be honored by similar favors from the same distinguished source.

We insert to-day a highly interesting letter from an esteemed correspondent of *Lehigh county, Pennsylvania*, on the subject of the prospects of the crops, the effect of the frosts upon the fruit trees during the last winter, and the general agricultural productions of the county. We need say nothing upon the intelligent character of the writer, his letter bespeaks him at once educated and observant. The fact he mentions in relation to the exemption of such corn fields as were ploughed last winter from the ravages of the cut worm, is one which will command attention. The remarks which he makes upon the effects of lime and clover upon the agricultural industry of *Lehigh county*, in arresting the desertion of its second and third rate land for the west, should awaken serious reflection in the minds of those who have it in contemplation to abandon their homes. We conjure them to follow the noble example

of the good people of *Lehigh*. We return our thanks to our correspondent, and hope he will continue to favor us with his enlightened views on all subjects connected with the objects and business of agriculture.

The following extracts from letters we have received from correspondents in North and South Carolina, shew that the citizens of these states are becoming sensible of the importance of entering into the Silk culture, and when we say that we rejoice at it from the very bottom of our heart, we but convey a faint idea of the pleasurable emotions which the intelligence inspires. We have not room for further remarks, but refer the reader to the extracts which follow.

Extract from a letter from a correspondent, dated
Chesterfield county, South Carolina,
July 17th, 1835.

"Finding that I cannot get the *Morus Multicaulis* seed, I have concluded to try the White or Italian Mulberry, and will thank you to send me the worth of the enclosed. There are hundreds of our citizens, females, who can hardly make out to keep the *bone greased* by their present employment, spinning, weaving, &c., and I think from the small experience I have had in the raising of silk worms, that this branch of industry will afford them at once delightful and more profitable employment. Many of our females among the poorer class are under the necessity of working in the cotton fields. This has always crossed the grain with me, and I have most ardently hoped that they might find some less laborious employment that would yield them as much or more profit: and I now look forward to better times in this poor country. The common Mulberry grows wild in great abundance in this section of the state, and cocoons of a fine quality have been procured from worms fed on them."

Extract of a letter to the editor of the Farmer and Gardener, dated

Currituck county, North Carolina,
July 22d, 1835.

The papers came duly to hand, and the same mail brought your letter of the 29th June, in which you so forcibly and so justly point to the culture of the Mulberry tree as an object of primary importance to the future prosperity of the original confederacy. I have long been convinced that silk must and would ultimately become an important item in the productions of this state, and have looked to it as an article that would claim an exemption from the onerous taxes of transportation and factorage, with which from the peculiar feature of our inland waters our heavy staples are

burthened, and from that largely proportional consumption by the operative producers, that weigh so heavily upon the corn farmers.

"And with a view of giving the thing an 'impetus,' I think I will sow some of the seed of the white Italian mulberry next spring, if I can get them from your place: and should be glad to know if those of the *Morus Multicaulis* could also be obtained."

"We move slowly here in the march of agricultural improvement, and two or three unsuccessful attempts have been made to get up a society for its advancement. I have now, however, hit upon a plan which I look to as most likely to conduce to the attainment of the object in view, and which is nothing more nor less than to make an effort to extend the circulation of your valuable publication in this region. You will send me three sets commencing with the volume."

We learn from a circular, that with the present number of the *Turf Register* and *Sporting Magazine*, "all editorial control over its contents and all personal interest in the work ceases" on the part of Mr. John S. Skinner, its projector, and late proprietor and editor. This work, as Mr. S. observes, was "commenced as was the *American Farmer*, without pioneer or patron, with a view to advance important interests which had been theretofore without any special advocate," and when we say, that under such circumstances, he succeeded with both works, we pay a proud and well deserved compliment to his genius and talents. At the moment when Mr. Skinner commenced the *American Farmer*, the business of husbandry was at its lowest ebb: an exhausted soil, and barren fields, those certain emblems of bad culture, greeted the eye in every direction in the old states—the ardor of the agriculturist was repressed by ill-requited toils, and he proceeded with his labors desponding and broken down in spirits. Such was the gloomy situation of things when Mr. S. commenced his first labors in the cause of the tillers of the earth; and besides the difficulties here presented, he had to encounter the prejudices of centuries. Men had grown up wedded to the ways of their ancestors. The odds were fearful; but most lustily did he contend against them; and if he failed in winning all from the injurious systems of their forefathers, his harvest has been one prolific of good, as is attested by those countless fields, reclaimed from their worn-out condition, which now teem with luxuriant crops, returning to their proprietors the

most ample remuneration for all the money and labor bestowed upon their regeneration, and adding millions of value to their annual productions.

Nor has Mr. Skinner been less successful in promoting the objects he had in view, when he projected the excellent work from which he has but just retired. In every direction where it has found its way—and its racy and spirited pages have introduced it to the notice of almost every farmer and planter of taste—he has infused his own ardent feelings, and enthusiastic admiration of the noblest of animals, into the minds of his readers. And his good works did not stop there: for, by establishing a just standard of value, he gave such an increased appreciation to this particular species of property, as eminently to promote the pecuniary interests of those engaged in raising of horses and other valuable animals.

When a gentleman whose labors have been thus successful—thus distinguished for their usefulness—retires from a post he has so adorned, he carries with him into retirement, a consciousness of having deserved, as he will receive, the gratitude of his country; and we are sure that the best wishes of his editorial brethren will be freely offered up, that his future prosperity, health and happiness may be unchequered by “painful incidents” either of a mental or physical character, and could their aspirations be gratified to the extent of their kind feelings, we are certain his pathway henceforth would be unstrewn with a single thorn.

The editorial duties of the *Turf Register* will be, hereafter, in charge of Mr. Gideon B. Smith, who has for some years been intimately connected with the paper, and engaged in its editorial management, and whose successful career as the editor of the *American Farmer*, has made his fine talents familiar to the American public, and of course renders our feeble tribute to his worth and ability superfluous; but this we may be permitted to say—that if the future patronage of the work should not be equal to the wishes of its friends, we feel assured it will not be because of any want of capacity or devotion on the part of its conductor.

TICKS ON LAMBS.—The enlightened editor of the *Cultivator*, recommends a decoction of tobacco to destroy ticks on lambs, and we have no doubt of the excellence of the remedy. But we think one more effective might be found in that highly aromatic herb, the *Pennyroyal*. We say more effective, not because we doubt that the tobacco water would destroy the ticks, for we know that it would; but in addition to removing or des-

troying those which might be on a sheep at the time of its being washed, the aroma of the *Pennyroyal*, would adhere to the carcass and fleece of the animal for a considerable time afterwards, and thus act as a *preventive* to future annoyance, long after the tobacco would have become inert and inoperative. It is well known that no tick will come nigh any thing impregnated with this eminently pungent member of the herb family. With many sportsmen, its application is familiar to their pointers and setters, with the two-fold object of preventing annoyance from ticks, and of driving off the herds of flees which congregate on their hides. A few drops of the essential oil of *Pennyroyal*, placed judiciously over a dog, is sufficient to clear out an army of these hopping annoyers, who decamp as promptly as would a *discreet calculating* gentleman from a house infected with the plague.

AN APPEAL

TO THE PEOPLE OF THE OLD STATES PARTICULARLY.

Among the many wagons conveying movers to the West, which daily pass through this town, was one on Tuesday attended by thirty-five persons, twenty-six of whom were upon it, the others followed on foot. They were five families from the western shore of Maryland, who had united in chartering a single wagon, the upper loading of which was bedding piled to the height of 12 feet from the ground, on the top of which 26 women and children were perched. On the next day, four families, containing 29 persons, with a single wagon, followed from the same neighborhood.—*Wheeling Gazette.*

We know not what effect such paragraphs have upon the feelings of others, but for ourself we can, in sincerity and truth, aver, that they cause the blood to course through our veins with more than icy-coldness. We love, we trust, our whole country with all the ardor of genuine patriotism; but as all human affections have their grades and degrees, so are ours regulated with respect to that particular member of the great American family of states, in which it was our humble lot to be born. For Maryland, we cherish an affection which we will not name; and although we rejoice with all the warmth of young-love in the advance of any member of the confederacy in the march of prosperity and greatness, when we see any such evidences of the downward course of things in the “*old thirteen*”—that glorious galaxy, whose chivalry and blood was the price of our freedom—as is to be found in the paragraph which forms our text, we confess it makes us sick at heart. What is the spectacle presented? In *two short days*, sixty-four of our citizens, from the same neighborhood, are seen passing through

a single town on the Ohio, wending their way to the far west, or southwest, and how many there are who will follow, our imagination cannot conceive; for it is but a few months since, we heard of a gentleman from one of the lower counties on the western shore of this state, who was deputed as an agent for thirty-five families to go to the West, to seek out an eligible location for them to emigrate to. But why do they leave those green fields—those cherished haunts of their childhood? Why do they depart from the soil whereon their forefathers dwelt for centuries? Why do they desert those sacred fanes, in which their ancestors and themselves have so often, and so long, offered up their anthems and their prayers to Him, who listens in mercy and decides in justice? Have those green fields, those haunts, that soil, and those fanes, no longer any hold upon their affections? Do not the associations of early life—do not those connexions formed in the spring-tide of their existence, never cross their minds?—do not those fond recollections of earlier and more lasting friendships, remind them of the thrice hallowed scenes which were once so dear to them? If reflections such as we have described, do not obtrude upon the thoughts of those whose eyes are cast towards the setting sun, there is no hope left—for human nature is not what we took her to be: she is more obdurate than marble—colder than the arms of death. But if these thoughts do sometimes steal over their minds, there may still be hope that all may yet be well—that the tide of emigration which almost threatens to take from many of the middle and southern members of the old states, the healthful, the industrious, the enterprising and the young, may be stayed, and that those who have contemplated breaking away from the ties of their youthful and more mature age, may be prevailed upon to abandon their intentions, and once more turn their thoughts towards the improvement of the loved soil that gave them birth. Ask those who have gone, or are going west, why they have left, or intend to leave, their native hills, and they will tell you “*the soil is worn out.*” We admit that much of it is worn out, and that in numerous instances its products do not repay the toil and expense of cultivation; but then this is not the fault of the soil; it was all originally kind, much of it fertile, and yielded generous returns for the labor bestowed upon it. Bad tillage, an injurious system of cultivation, and too long continuance in exhausting crops, have brought it to its present deteriorated state; but this, certainly, does not justify the conclusion that its former fertility cannot be restored. We believe that *all* of those worn out

fields can be *thus* restored by the adoption of a judicious system of culture; and that such as are within the reach of the advantages of those resuscitating beds of shell and other marl, in the tide water districts, may be carried far beyond the highest point of their original fruitfulness, and that too, at a cost which will bear no comparison with the increased amount and value of the produce which may be raised from a given quantity of land. If this be practicable, should not the whisperings of patriotism—the veneration for ancient and present associations—those ties which bind man to the place of his birth—should not these, admonish him to make one noble, one generous effort in its behalf? This question is so simple as not to admit of debate—every virtuous and ennobling impulse of the heart responds a warm, a sincere, an ardent affirmative. They call upon us, one and all, to make that effort.—Who is there among us, whose fortune it may have been to have been born in one of the old states—of those states which laid the foundation of human liberty—no matter how humble his sphere of life—that does not feel the distinction an enviable one? When we say this, we mean nothing disparaging to the new states—those vigorous and patriotic scions of the old stock—for God knows we love them *all*, in sincerity and singleness of heart. Then let each and all of those whom we address, turn with renewed affection—with renovated regard, and an unswerving determination, to make another manly effort, one which shall be alike worthy of ourselves and of our respective states. The rotation of crops, wherever tried, with the aid of clover and plaster alone, in many instances, have wrought wonders in the way of meliorating the condition of the soil, and where lime, and an economical and discreet husbanding, and application of those manures produced on estates, have been adopted, the improvement has been still the more manifest. Lime, it will probably be said, is costly—it is costly, in one sense, to all who have to purchase it—to many whose localities are remote from its deposits, its obtainment may be said to be impracticable; but to those who live within a distance accessible to navigation, its first cost, whether that be twelve or twenty-five cents the bushel, is not, and should not be, an object; for it will pay an interest of more than an hundred per cent. So also would the marl prove cheap to such as can procure it, so as to have it delivered on their fields at these prices; and we have been favored with the perusal of a correspondence, which shews that in some situations within the marl districts, it can be delivered on the landings of many gen-

tleman, at from 6 to 8 cents, and in some situations, more favorably located, at 4 cents the bushel. No one acquainted with the fructifying properties of marl, will question the correctness of our assertion, when we state, that by the application of from 100 to 200 bushels to the acre, according to the degree of exhaustion of the soil to which it is to be applied, its rate of yield may be raised from its present depressed state, to from 20 to 30 bushels of wheat to the acre; in favorable seasons, that of corn to from 8 to 10 bbls., and other articles of produce in like proportions. The first cost of either lime, shells, marl, or ashes, should not deter any farmer from trying their efficacy, where they do not exceed the prices named, as there can be no question but that the investment would prove safe, and of lasting benefit to him who may make it. The farmers on *Long Island*, New York, pay from 6 to 10 cents a bushel for leached ashes, then have to pay freight for fifteen or twenty miles of water carriage, and the expense of land transportation from 5 to 6 miles, and still grow rich. The *modus operandi*, is easy of solution. By the use of these ashes they make *one* acre produce what it formerly required *three* to do, and thus they save the expense of cultivation and of labor on *two* acres, together with the interest on the value of the land.

But there is another *field* open to those who desire to remain—a *field* rich in promise, and which should gratify even the most exorbitant thirst for the accumulation of wealth. We allude to the *SILK CULTURE*—a business which, if well conducted, is calculated of itself, to make every owner of a small farm *comfortable*, each holder of a large one *rich*—we use both terms in their broad and most ample sense. As we have before remarked, by the adoption of this as a branch of husbandry, those very worn-out fields—which are now driving the people of NEW JERSEY, MARYLAND, VIRGINIA, NORTH CAROLINA, and SOUTH CAROLINA, to seek homes among strangers, and encounter all the hardships and privations incident to new and border settlements—may be converted into so many mines of wealth. We ask no man to go into it as an exclusive business—we desire no one to risk the support of his family upon it; but we do ask—we do *conjure* every one, who still clings with affection to his first home—to his birth place—to engage in it as a *part* of his business. Let those who can afford to *buy the trees* from the various nurseries in our country, *buy them and commence the work*, so that the influence of their example may be felt and followed. Let those who cannot afford to make an outlay for the *trees*, buy one, two, three

or four ounces of the *Morus Alba**—the White or Italian mulberry, and begin the raising of the trees for themselves. Let those who cannot spare a larger quantity of land than *one* acre, appropriate *that*, to the culture of the mulberry, and let each, according to his ability, set in mulberry, whatever number of acres, which, to him, may seem fit and proper, from the number named, to *fifty*, either in hedges or standard trees, and we pledge ourself, that if those plantations of the mulberry be nurtured with care, and turned to the advantage of which they are susceptible, the necessity for emigration will cease to exist in any of the middle or southern states,—there is not an acre of those very lands about to be deserted, that may not thus, in silk culture, be made to produce more than twice as much in value as any western, or south western lands which might be procured, if cultivated in the present staples of those states. Why then go beyond the boundary of domestic comfort in search of the land which abounds in the elements of wealth, when *that land* is at your own door, if you but improve the resources which God has placed within your reach? Let us test it by the results of experience. An acre of mulberry trees, full grown, will feed 540,000 worms, and these, as 3,000 cocoons are equal to a pound of silk, will make, if properly attended to, 180 lbs. which when reeled, at the very *lowest* calculation, would be worth \$4 per lb., equal to \$720. Now let us see what would be the expense attending the feeding of the worms. The experience of Europe, as well as that of our own country, show that 2 persons are competent to feed *one million* of worms the *first* week, 4 the *second*, 8 the *third*, and from 16 to 20 the remainder of the time, which for the sake of data, we will set down at 2 weeks more. This we wish it recollected, is the

* We recommend the *Morus Alba*, not that we would not give the preference to the *Morus Multicaulis*, if it could be obtained in sufficient quantities to make its introduction general. We believe it very far superior to all other kinds of the mulberry tribe; but we are not certain, though we could wish to believe otherwise, that, for some years at least, we shall have to depend chiefly upon the first named, for a supply of food for the silk worm, and, indeed, perhaps until the trees of the latter are sufficiently aged to produce seed. The Italians have for centuries made a most beautiful rich and glossy silk from it; we see no possible reason why we cannot do so likewise, and we are for going to work with that which is at present attainable, in preference to waiting for hopes that may never be realized.—We know that the Italian mulberry withstands our climate—we know the worm eats it kindly, and we know it makes good silk, and that should suffice.

calculation of the number of hands requisite to attend to 1,000,000 worms, but as we wish in all charges against the culture, to be rather over than under the amount, we shall tax the 540,000 worms with the expense of almost twice that number for attendants. And now let us see how the account will stand.

Dr.		Cr.	
1 Acre in Silk Culture, in Account with A. B.			
Interest on 1 acre land, value at \$20 at 6 per cent.	\$1 20	By 180 lbs. of Silk at \$4 per lb.	\$720
Interest on laboratory, valued at \$500 at 6 per cent.	30 00		
Hire of 2 men 5 weeks at \$6 per month each.	15 00		
Their board at \$1½ per week,	15 00		
Hire of 2 women 4 weeks, at \$3 per month,	6 00		
Their board at \$1½ per week,	12 00		
Hire of 4 women 3 weeks at \$3 per week,	9 00		
Their board at \$1½ per week,	18 00		
Hire of 12 children from 7 to 14 years old, 2 weeks at \$1 per week,	24 00		
Their board at \$1 per week,	24 00		
Balance as per contra,	\$565 80		
	\$720 00		\$720 00
		By balance or clear profit on 1 acre in the Silk culture,	\$565 80

Here then we have as the clear profit resulting from an acre of ground in the silk culture, after making the most liberal allowances for all possible charges accruing—after allowing \$20 for an acre of worn out land, which in many cases would not bring one fourth of that sum, and but seldom more than a moiety, after taxing one acre with nearly the expenses of labor for two, and after putting the silk at the lowest or minimum value—we say after dealing thus hardly with the produce, we have a clear profit on 1 acre thus appropriated, of \$565.80. This calculation allows 3,000 cocoons to make 1 lb. of reeled silk, whereas the experiment of Mr. Elias Frost, of Plainfield, Massa-

chusetts, proved that 1243 yielded him 7¾ ounces of silk, when reeled, being rather better than 18½ ounces of silk to 3,000 worms; or of 1 pound to a fraction less than 2,527 worms. This experiment was upon a small scale, it may be said—granted—it was upon a small scale—but by due vigilance, unceasing vigilance, and a proportionate increase of attendants, the same result might be realized to the extent of many acres. We do not wish to conceal the fact from the agricultural community, that those who enter into the silk business must imitate the worm in its toils. He who expects without exertion during their feeding, to realize profit from their labors, had better not engage in it. But if he will give during the very limited period of their probation here—say five weeks—due vigilance, he will, indeed, reap a harvest worthy of his garner.

The calculation of food for the worms is based upon the production of 108 full grown trees, placed on an acre, 20 square feet apart; but the same, or a greater quantity of leaves might be raised on an acre of land planted in hedges six feet apart, the fourth year after sowing the seed, if the seedlings were pushed ahead by manuring and clean cultivation.

We have spoken of worn-out lands being adapted to the culture of the mulberry tree, and we repeat that the experience of Europe shows, that thin sandy or gravelly lands, yield a nutriment which produces the finest, most elastic and glossy silk; but here we would not be understood as wishing to recommend, that the mulberry plant be confided to poor worn-out lands without their being first liberally manured; and whether planted in standard trees, or in hedges, the soil should, most assuredly, be kept in a state of generous tilth for the first four years, by cultivation. Clover between the rows, to be well plastered, and a lay turned in twice during that time, taking care to keep the young plants or trees free from the obtrusion of grass or weeds, would be sufficient to ensure their subsequent growth. Potatoes or other roots, as parsnips, mangel wurtzel, carrots, or beets, might also be raised between the standard or hedge rows, so that while the mulberry was maturing, the ground appropriated to their culture, could be made to more than repay for all expense attending it. Thus would the bug-bear of having "to wait so long" be stript of its hideousness.

A few words more and we will bring this article to a close. How shall the good work be begun? There are various ways by which it might be. Individuals may, and we hope will, begin it. In the eastern states, it has already been laid hold of in every possible form,—societies, companies, and individuals, are there already exerting their respective capacities to give it motion. In Connecticut alone, four county societies have been specially formed for furthering its culture, since the 1st of March last, and almost daily we see notices of new companies about being formed.—These things are as they should be, and we

would appeal to the pride of the middle and southern states, whose soil and climate are so much better suited to the culture of the mulberry, not to let our eastern and northern brethren outstrip us in this lucrative branch of husbandry, but rather join with them in the generous rivalry of brothers, for the palm of victory. And may we not here ask every agriculturist living in those states immediately interested, to step forward to the rescue. In a business which equally concerns all, none should indulge in indifference of feeling. What we ask, therefore, is, that some gentlemen in each neighborhood, will take an active part and give an "impetus to the ball of the revolution"—it needs but a beginning, and he who shall be foremost in this glorious work of regeneration, will deserve to live in the fondest recollections of his countrymen. The organization of societies for agricultural purposes wherever they have been formed, have conferred blessings, and we enjoin it upon those who possess influence to exert it now; for now is the time when their country needs it.

REMARKS ON THE CULTIVATION OF TURNIPS.

As the season has arrived for preparing the ground and sowing Turnip Seed, I have deemed it proper to give the following directions. After twenty-four years' experience, I recommend them as containing the result of my observation in this particular branch of husbandry, and if they should be carefully followed, the turnip crop, which is regarded as an uncertain one, may be rendered a sure and certain one.

The land suited to this crop ought not to be rich, but of a medium fertility, and pulverized by repeated ploughings and harrowings, until very fine; as near the consistency of pulverized virgin soil of new land as possible: and the turnip crop will very suitably succeed all early spring crops, such as potatoes, peas, radishes, beans, and clover after the first mowing, and will do without manure, provided the four first enumerated have been manured in the spring.

MANURE.

A small dressing of manure is necessary, say ten ox cart loads to the acre, of ashes or old cold manure, such as yard shovellings, &c.; unfermented manures will spoil the crop by making it run to top, rendering the roots hot and spikey.

SEED AND ITS PREPARATION.

This is one of the most important parts to be attended to. Without good, true seed, all the other labor is lost. I feel that I cannot impress the necessity of procuring good seed, too forcibly upon the mind of the agriculturist, as some persons from mistaken notions of the true character of this excellent root, have adopted the ruinous plan of raising their seed from refuse turnips—now it is well known among practical horticulturists, that if one such turnip be permitted to go to seed among twenty good ones, it will spoil the whole. Indeed, it would be almost as easy a task to raise good turnips from radish seed as from such turnip seed.

In order to hasten vegetation, and by that means escape the ravages of the fly, it is best to soak the seed in rain water twenty four hours; but if wanted sooner a few minutes in warm water will do. It is strongly recommended to soak the seed in lamp oil, which is said to impart a dis-

agreeable flavour to the seed plant, which saves it from the fly. After soaking the seed, it ought to be rolled in plaster, or ashes, to dry them; and for sowing broad cast, I mix a pound of seed with a bushel of the mixture to the acre; but those who have the turnip drill may sow the naked seed in rows about twelve inches apart, by closing every other slide, which will save much time in hoeing.

TIME OF SOWING.

In the neighborhood of Baltimore, if the turnip seed can be got up quick, it will do to sow as late as the 25th of August, for table use; and for stock, it would be well to sow from the 25th of July to the 10th of August. Two weeks later will do on the tide water and in old Virginia; the ground being well prepared, the manure spread when necessary, once ploughing, and then immediately give the ploughed ground one stroke with the harrow; then sow the seed while the ground is damp, and give it another stroke with the harrow, and the plants will soon appear. After they are up, should the fly be destructive, roll them with a roller. As it is apt to be dry at this season of the year, it is best to sow a little before or soon after a rain, to get the plants up; otherwise the seed often perishes; but sowing on fresh ploughed ground is a great advantage.

HOEING, &c.

After the plants are up and the largest leaf has grown as large as a cent, run the harrow through them, which breaks the crust, buries the young weeds, and moulds the plants; and from the pound of seed, if the fly has not been destructive, there will be plenty of plants to admit of the harrow being run each way, which puts the ground in fine order: then commence with the all-important work of hoeing, without which all the other work will be nearly lost. Each hand must take about five feet wide and use the hoe actively, and single out the plants as near twelve inches apart as can be done by the eye. This is a tedious operation; but four or five hands, sticking close to it, will soon learn to do the work quick, and get over a large piece of ground in a day; and after it is done, there will be one single plant to each foot of ground, instead of a dozen to the foot in some places, and only one to the yard in others, as is the case when the seed is sown thin, and left without hoeing or thinning; in consequence, in the one case, they will be too thick to grow, and in the other, will not grow for want of culture. The large white flat or Norfolk is the best kind for early use; and the ruta бага, and yellow bullock, for late use. Either of these ought to be sowed earlier than the above—the first a month, and the latter one or two weeks. The white stone and tankard turnip, are good kinds, particularly the latter, as it grows to a great size and is sweet.

I should not omit to mention the *Hybrid*, a new variety produced by a cross between the Swedish and *Ruta Baga*. It is superior in size and flavor, and is closer and finer in texture than the latter, and is as rapid in its growth as the White Flat Turnip. It is superior to any of the White Field Turnips, and keeps longer than any of them, and very nearly as long as the *Ruta Baga*. The colour is yellow, the shape oblong.

ROBERT SINCLAIR.

Extract from a letter from an intelligent and highly respectable correspondent of *Lehigh* county, Pennsylvania, dated July 10th, but which did not come to hand till the 27th.

[Communicated for the Farmer & Gardener.]

The prospects of the wheat crops, in our vicinity, are good, the straw however looks rather short. But as to Indian corn the expectation is that the supply will be very scanty. About planting time we had a long spell of dry and cool weather. Some of the seed which had been steeped was found rotten, another part did not sprout till four or five weeks after planting; a great deal of which fell a prey to ants, the rest as soon as it appeared above ground, was attacked by the corn or cut worm. Many farmers have not thought it worth while to harrow their corn, but have ploughed over extensive fields for buckwheat. It is to be remarked that fields which had been ploughed last fall escaped the ravages of the worm. The hay crops likewise were deficient, except on lands in prime order. The cold about the 5th of January, during a complete calm, was from 15 to 20° below zero of Fahrenheit. Along the water courses numbers of apple trees have been destroyed; on low lands, generally, quinces and peach trees are killed, while on the tops of hills and mountains no injury appear to have been suffered at all.—The reverse of all this was witnessed as the consequence of the frost about the middle of May, 1834, when fruit trees in general had cast off their blossoms. At that time vegetation seems to have been afflicted not so much by the frost itself as by the sunshine consequent upon it; and situations near to streams of water afforded shelter by the fog which was seen to rise there. Northampton and Lehigh counties south of the Blue Mountains' ridge, may be called a wheat country. But as a whole it is inferior to Lancaster and Dauphin counties, &c. and embraces a great variety of soils. In speaking more particularly of Lehigh county, it may be assumed, that the introduction of the use of lime in farming, and the culture of clover about 20 years ago, wrought a most salutary revolution, and saved the second and third rate lands from being deserted for the far west. Ever since that period agriculture is rising. Every summer adds to the number of solid and capacious barns, and old ones are enlarged. A considerable part of the county, especially on the borders of the Lehigh and its tributaries, is limestone land, but the trouble and expense of carting the stones the distance of 14 miles is not thought too much, thus almost the whole of our county is provided with this commodity. As soon as winter sets in, or as often as during summer the other farm operations are suspended, the quarries present a lively scene, and waggons or sledges are seen toiling along up and down through the country, broken and hilly as it is in many parts. The consequence is, that you see beautiful farms not only in hollow lands, but in situations where you never would look for them, on the tops of the mountains as well as on their declivities. Wheat however is not the only staple article; we produce a great quantity of rye for sale and home consumption, for man and beast; for be it remembered that we eat rye bread in preference, even when we have both sorts on the table. The effect of lime upon rye land is

quick and immediate, hence whoever is improving his land begins with rye. On the Lehigh land, quarried limestones are sold at the quarries for 25 cents per ton. In other sections, the common way is for farmers to do all the labour themselves and pay to the owner of the quarry 6 cents for every ten bushels of quick lime they draw from the kiln, or they engage hands paying to them from 1 to 1½ cents per bushel of quick lime, the hands to find their own tools and powder where necessary—this is in addition to the fees of the owner of the quarry. The work at the kiln to be done by the farmers. If you wish to buy quick lime you can have it deposited on the fields at ten cents per bushel and upwards, according to distances. We put from 40 to 60 bushels on the acre, repeating the operation every five years. From the time that stone coal from Mauch Chunk has been furnished in abundance along the Lehigh canal, and that its use in burning lime has been understood, agriculture has received a new start. Previously, the scarcity of fuel—though rather prospective than actual, operated as a check upon the universal use of lime. Now the coal is mixed with the lime stones, and no more wood is required but what is necessary to ignite the coal, which may be done with 1 or 1½ cords, thus not only a mass of fuel is saved, but a great deal of hard labour,—the coal when once fairly burning requiring no farther attendance.—Timothy is not much raised on dry land, as its effect upon the land is not so beneficial as that of clover. Common rotation, 1st. clover, 2d. indian corn, 3d. oats or flax, and potatoes, manure, 4th. wheat, 5th & 6th. clover, 7th. wheat, without manure; 20 bushels of wheat—50 bushels of Indian corn, 2 tons of clover per acre, are good crops, though there are many instances of more having been produced. Average somewhat below this. For the benefit of such as wish to sprout a few seeds of Gama Grass, let me add my recipe. Split the seed with a small chisel, put the kernel in a tumbler with sand, keep it moist, and in 8 days, if the seeds are not covered too deeply, the grass appears. The splitting is easily done. The seed of gama grass is in the shape of a cylinder, on the surface of which you will observe a spheric triangle, two sides being formed by seams, and the third by the base of the seed, but the two sides or seams, one not quite connected with the base, make this connection with a chisel or knife, and the triangle will fall out like a trap door, the kernel adhering to it; take care not to separate it further, or injure it, which is very easy to avoid.

NATIVE GRASSES.—ESSAY No. 4.

FRESH THATCH.—I have a species of Grass, which is spontaneous, but not very common, and which never had been cultivated, to my knowledge, before I undertook its culture. A few years ago I sowed some of the seed, a part on moist, and the other on dry ground. It made no appearance that I could perceive the first year, but in mowing over the ground since, I found it had come up, but had made very slow headway, so that I thought but little of it. I took a little more notice of it this year, [1834] as it was increasing among other grasses that were on the decrease, in binding out.

The *Fresh Thatch* is most frequently found

near salt rivers and marshes—although it is found quite thrifty, miles from the salt water. It first attracted my attention from its large growth, it being leafy and having a lofty appearance. Its common height is about four feet; it has a solid round stalk, a flat leaf, heads out, and its appearance resembles salt thatch very much in almost every particular; differing, however, from the Salt Thatch in not being hollow. It is called by many *fresh thatch*. It is a very heavy fodder when made into hay. *Salt Thatch* affords more fodder from the same bulk than any other grass usually cut with us; but I believe *this is twice as heavy*, and is very good fodder. It is found growing spontaneously, indiscriminately on very moist and on dry ground. That it would produce a large amount of hay if under proper cultivation, I have no doubt;—and as far as my knowledge extends, it never fails of a crop. It roots strong, and never appears the least affected from drought. It is evident that it would produce two good crops in a season if rightly managed. I noticed mine springing immediately up, after being mowed, to about the same height as the first.

This grass came to my knowledge, in the first place, as follows:—In travelling the road through Stratham to Exeter, ten miles from Portsmouth, on the farm of Mr. Taylor, formerly owned by Captain Walter Weeks, now deceased, on a bluff, near where the gravel has been hauled away, and left ten or fifteen feet above the road, may be seen a bed or patch of this grass, growing exactly on the verge of the precipice. I noticed it in this exposed state, the roots hanging down from the turf, where the earth had fallen from them, the soil being rather of an ordinary quality. Seeing it growing here under all these disadvantages, in a *thrifty state*, and knowing for a certainty that it grew on poor, dry ground, I could not but think that the last might be profitably cultivated, and from this patch I got my seed four or five years since. So little of my seed took that I did not think much of the grass since, until last fall, in October,—passing that way, I found the bed of grass to which I have just alluded, had much increased. I took off the heads without leave, believing that I harmed nobody, and determined to give it a more fair trial than heretofore. I therefore, beat out the seed, and sowed it both on dry and moist ground, too late to expect it to vegetate last fall, and reserved a portion of it to sow in the spring, [1835.]

I was conversing with Mr. Samuel Piper, of Stratham, the other day, and mentioned the circumstance, and he recollected the spot of grass very well, and said he had a patch in his field; that it grew very luxuriantly, but he never had thought much about it. I asked him his opinion as to what an acre would produce; and he supposed it would produce at one crop four tons.—My opinion coincided with his, that it would do so under the disadvantages in which the grass was found,—without any pains or expense of culture. We are to consider that this grass, wherever it is found, has skulked along under our fences, and amongst rocks and bushes, and broken into our enclosures, and there suffered to remain, only, by getting foothold among those objects, where it could not be easily surprised by its enemy, with that deadly weapon, the plough, which is sure to

destroy root and branch whenever found in the open field, occupying good ground.

Mr. Piper observed that his patch grew behind a large rock, that he always tried, when ploughing by it, to destroy it.

From the following circumstances I have great reason to believe that under high cultivation a much greater crop could be obtained.

In journeying on the road leading from this place to Boston, I espied some of this grass in a rich field, near the salt marsh, in a field of Mrs. Wells, in Hampton-Falls. Its extraordinary height and appearance attracted my attention,—it being then about the middle of October, and the grass perfectly fair and green. I pulled up one of the stalks, took it home, and measured the length of it, six feet eight inches. I have the stalk now in keeping.

From the knowledge I have of this grass, I am led to believe that by putting it under the *highest cultivation*, a very great crop can be obtained, in the whole season. I suppose from ten to twenty tons at least can be obtained per annum, and I believe if rightly managed, it will be found to be very good fodder. As to its worth for pasture I *know nothing*,—but from the circumstances of its *never being known in pasture*, I doubt its great worth as to *close feeding*. Let the reader recollect the vast difference between this and the culture of our usual grasses—between choosing good grounds, ploughing and manuring them at the expense of twenty-five ox-cart loads to the acre, the first ploughing,—and the same the following season, when laid down to grass, and the growing of the *fresh thatch*, in the poorest of the field, never manured or ploughed at all. What is the probable difference in the crops, per acre? The one which has been so well cultivated, will produce from one to two tons per acre,—whereas the neglected, poorer, hard ground, if set in *thatch*, may grow four tons on the same quantity of ground. It is *possible* if not *probable*, that if this grass, should succeed well here under proper cultivation, that it will do well at the South,—and I shall feel myself bound, after my experiments are successfully tested, to inform the public, and especially my friend who has so kindly sent me the seed of the Gama, not forgetting to send him seeds of such of the grasses as I may deem valuable.

I will name another species of Grass that I found at Hampton-Falls, mixed in with the other grass and with bushes. This latter is a handsome grass, or grain; it nearly resembles bald wheat, about the same height, full of leaves, and uncommonly green in appearance, before it was dried, as well as after. The kernel or seed is longer than wheat, but not full; it appears not to be ripe, although in October;—which is most proper to call it grain or grass, I know not; I can better determine after being better acquainted with it. I should think much of this if I had not found it so near salt marsh. I sowed a portion of the seed last fall, and another this spring. It appears every way to look inviting as food for animals as any vegetable I ever saw, and in the culture of this there is nothing to fear from want of seed. I am much pleased with it, and have a great hope it will prove valuable. I am entirely unacquainted with it, any more than what I have named.—Of these seeds, and all those that I am not well

acquainted with, I am careful to sow a portion on high and low ground, and in Fall and Spring.

ABEDNEGO ROBINSON,
Of Portsmouth, N. H.

MISCELLANEOUS.

WHAT A FARMER WANTS.

The Farmer wants a stable mind,
A purpose sure and steady,
To patient industry inclined—
For business always ready.
Good careful habits well infixed,
And judgment acting clearly,
To sift out truths with error mixed,
Though it should cost him dearly.
He wants a neat and prudent wife,
Who, when he earns, can save it;
Who kindly soothes the cares of life,
(Best gift of him who gave it.)
He wants a snug and tidy farm,
And health and strength together;
A house and barn to keep all warm
In cold or rainy weather.
Heaven's blessing then must crown the whole
Or all his hopes are blasted;
But with this resting on his soul,
The purest joys are tasted.
He then enjoys a bliss, unknown
To those the world calls greatest;
Known only to the good alone,
The earliest and the latest.

CURIOUS EXTRACT AND PROPHECY—From the celebrated Matthew Lyon, formerly a member of congress, to a gentleman in Baltimore—dated 25th May, 1819.

“Your friend, the long detested Cobbett, has excited me to wish for some more of the Swedish turnip seed, than what the doctor has wrote for; a half ounce package directed to M. Lyon, Jr. P. M. in this place, would be a great favor, and an equal quantity of the best Radish seed would also be a favor; our Radish seed is run out, and all our Radishes go to seed before the root become as large as a child's finger—the Swedish turnip seed may arrive time enough, that is in 6 weeks.

I say the long detested Cobbett, because I am sure that no one could have acted the part he did 20 years ago but one possessed of a villainous heart—his talents then were at market, and have been ever since. I believe that the wretch is beholden to the purse and the influence of the weak Sir Francis Burdett, for a great share of the wealth he enjoys at present. See how he treats the old Baronet—Cobbett has of late been doing good; I am willing it should be so—before he never would be an American citizen! why this caution? because the wretch has an ambition to be a *member of the British Parliament some day!* bad as he is, he is just fit for the place he covets.

I am, very respectfully,
Your ob't. Serv't.

M. LYON.

To J. S. Skinner, editor of the American Farmer.

ANTI-BILIOUS AND BILIOUS CHOLIC TINCTURE.

The following prescription was given, many years since, by an eminent Physician of this state, to a friend residing in the tide water region, in a situation where the autumnal fevers annually prevailed. At all seasons of the year, this friend was

subject to the most violent attacks of *bilious choleric*, and for ten or twelve years, had never escaped a fall without a bilious fever, in some shape or other, and as he lived some considerable distance from a Physician, medical aid was difficult to be obtained.

Thus situated, he applied to the Physician in question, to give him a prescription for a remedy which he might keep by him in readiness, in order that he might, at least, be able to hold his enemy in check until medical aid could be procured. Now for the prescription—which instead of being a *check* proved a *curative* :

Take $1\frac{1}{2}$ oz. Gentian root,
 $1\frac{1}{2}$ oz. Rhubarb,
 $1\frac{1}{2}$ oz. Jalap,
 2 oz. Ginger,
 2 oz. Calamus,
 $\frac{1}{2}$ oz. Ipecacuanha,
 1 oz. Orange peel,
 1 oz. Seneca Snake root,
 2 oz. Centaury.

The whole to be bruised fine, or pulverized, and put into a gallon jug,—then add a sufficient quantity of Holland Gin to fill up the jug, let it stand to digest for forty-eight hours, when it will be fit for use—the oftener it is shaken during the first forty-eight hours the better. The tincture when made should be permitted to remain on the ingredients, as it can be decanted off in a *fine* state when wanted for use. A wine glass full is a dose to be taken when attacked with the *cholic*, to be repeated at intervals of an hour until relief is found; more than one dose is hardly ever necessary.

With regard to the autumnal diseases, the Physician who gave this prescription, recommended its use whenever any derangement of the stomach indicative of a bilious condition of the system occurred in the fall of the year, to be taken in doses of a wine glass full at intervals of an hour until it acted freely upon the bowels, and if the derangement was considerable, that the two first wine glasses might be exhibited at intervals of half an hour.

This medicine is as prompt in its operation as in its relief, and combines in itself the properties of a carminative, a purgative, a tonic, a diuretic; it determines to the surface, and is sufficiently emetic to rouse and give healthful action to the stomach. As Dr. W. observed—"no gentleman living within the deleterious influence of marsh miasmata, or who is subject to bilious or other choleric, should be without a jug of it prepared in his family."

MARYLAND HORTICULTURAL SOCIETY.

SATURDAY, July 25, 1835.

The following articles were exhibited, viz :

By Mr. Richard G. Valentine, six large Tomatoes, measuring $15\frac{1}{2}$ inches circumference.
 By Mr. Richard G. Valentine, fine specimens of the Windsor and Orange Pear.
 By Mr. Thos. Dixon—specimens of the Bell Pear.
 By Mrs. Forney, 4 varieties of very fine Apples, and 3 kinds of very fine Plums.
 By Mr. Geo. H. Keerl, a splendid specimen of the

Lord John Russel Dahlia—Levick's Commander-in-chief Dahlia, and double dwarf Sunflower.
 By Master Daniel Hook, fine specimens of the Bien Amie and Maria Addison Dahlias.

By Mr. Saml. Feast, 3 varieties of Heaths, Nerium Coronarium, Plumbago Capensis, Hibiscus Sinensis variegata, gloxinia maculata, Fuschia coccinea, Pelargonium Russellianum, Jasminum odorata, 12 varieties of new roses, with many others, &c.

At 12 o'clock the committee awarded the weekly premium to Mrs. Forney, for very fine Apples and Plums.

GIDEON B. SMITH, Cor. Sec'y.

FOREIGN ABSTRACT.

Advices from London and Liverpool of the 23d and 24th of June have been received.

The governments of France and England appear to have determined to aid the queen of Spain without subjecting themselves to the responsibility of an open intervention. Instead of yielding a manly assistance as required by the quadruple treaty, of which they are parties, they merely suspend their prohibitory laws so as to allow enlistments to go on in favor of their ally. This does not come up to our notions of what is due to national honor: we are for the straightforward ingenious course, which in defence of right never stops to calculate consequences. Recruiting for the service of the Queen was rapidly going on in England, France and Belgium, and for the Carlists in Holland and Germany. The Queen's affairs, however, appear to have assumed a more favorable aspect at home.

William Cobbett, member of parliament for Oldham, died at his farm in Surry, England, on the 18th of June.

An explosion in a coal mine recently took place in England; by which 75 hoys and 25 men lost their lives.

There is a project going on in the French Chambers to do away with the government monopoly of tobacco.

The new Portuguese ministry are unpopular, but although there was considerable excitement no open breaches of the peace had taken place. It appears that the young widowed Queen had formed the determination of taking a French Prince to her arms as her liege lord, but that England had *protested* against the measure.

MARKETS.

Liverpool, June 23d, 1835.

Scarcely any change has taken place in our Cotton Market for a fortnight past, during which the demand has continued moderate. The import into Liverpool since last January, amounts to 530,000 against 522,000 to same period last year; in the supply from the United States the decrease is 11,000 bales. The stock in this port is estimated at about 208,000 bales, of which about 178,000 is American.

The flour market continues dull, Turpentine in fair demand; the last parcel sold was 2200 bbls good quality at 11s 6d a 11s 7d per cwt, chiefly at the former price. The demand for Tobacco has been in a great measure suspended for a week past, but the Market remains firm.

Tobacco, Va. Leaf 4 a 7s, stemmed $4\frac{1}{2}$ a 7s, Kentucky Leaf 4s a $5\frac{1}{2}$ s, Stemmed 5s to $5\frac{1}{2}$ s.

Rice 16s to 18s, Cloverseed per cwt. 50s to 60s, Quercitron Bark 9s 6d to 10s 6, Turpentine 10s 6d to 12s 6d, Tar 13s 6d to 14s.

Cotton—Upland $9\frac{1}{2}$ a $12\frac{1}{2}$, Orleans $9\frac{1}{2}$ a 13, Mobile 10 a 13, Alabama $9\frac{1}{2}$ a 11, S. Island 22 a 30, Stained 12 a 18, Flour in bond 17s 6d a 25s 6d.

DOMESTIC SUMMARY.

The citizens of Kent county, Md., have resolved to erect a monument to the memory of the late Gen. Philip Reed, than whom a braver or a better soldier never lived, none more deserving of the lasting testimony of a nation's gratitude.

The people of Vicksburg, Mississippi, have recently inflicted summary punishment in the name of *Lynch-law*, upon a number of persons charged with the crime of gambling, and at other places in the same state, similar punishment has been visited upon others charged with being concerned in an insurrection of the negroes. In both cases several individuals were hung—in the first, five gamblers, and in the latter upwards of thirty blacks and whites. Summary punishments in a land of written constitutions and laws are always to be deplored, and should be discountenanced. There are, to be sure, occasions where the safety of whole communities require more prompt action than awaits the operation of the law, but these are few, and the evidences of their existence should be obvious indeed, before such measures can be justified, and we hope they exist on the present occasion.

The legislature of Delaware has just closed an extra session, and we perceive that among the acts passed, there is one granting to the Wilmington and Susquehannah Rail Road, all the powers necessary for a speedy completion of that road.—We rejoice at this,—first because as an American we feel a national pride at every facility of intercommunication which is effected, believing that each will add another link to that chain which is to bind us together as one people—and secondly—because the noble bearing of the chivalrous little state, in our struggle for independence, endear her to us by associations which we cherish with feelings of the profoundest veneration and endearing affection.

The route projected of the Rail-road from the city of New York to Erie, having been completed, the engineers are preparing thirty or forty miles of the road for contract, which will be speedily given out.

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Notice of Mr. Robinson's essay on Grasses—do. of a communication from a correspondent of St. Mary's co. Md.—do. of a communication from Lehigh co. Pa., on the crops, value of lime, &c.—Notice of, and extracts from, letters from correspondents in North and South Carolina, on the policy of commencing the silk culture in those states—Notice of Mr. Skinner's retirement from the Turf Register—AN APPEAL by the editor to the people of the old states, particularly—Robert Sinclair on the Turnip culture, containing directions for selecting and preparing the ground, the kind and quality of manure, quality and preparation of seed, time of sowing, and mode of cultivation—Communication from Lehigh co. Pa. on the crops, rotation, use and value of lime, &c. Mr. Robinson's essay on *native grasses*—What a Farmer wants—Curious extract and prophecy concerning Cobbett—Anti-bilious and bilious choleric tincture—Proceedings of the Maryland Horticultural Society—Foreign Abstract—Domestic Summary—Prices Current, &c.—Advertisements.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,.....	bushel.	2 50	
CATTLE on the hoof,.....	100lbs	5 50	6 50
CORN, yellow,.....	bushel.	90	91
White,.....	"		90
COTTON, Virginia,.....	pound.	17½	18
North Carolina,.....	"		
Upland,.....	"	18½	19½
FEATHERS,.....	pound.	37	40
FLAXSEED,.....	bushel.	1 25	1 37½
FLOURS—EAL—Best wh. wh't fam	barrel.	8 00	8 50
Do. do. baker's,.....	"	7 50	8 00
Do. do. Superfine,.....	"	6 75	7 00
Super Howard street,.....	"	6 87	7 00
" wagon price,.....	"		6 62
City Mills, extra,.....	"		
Do.	"	6 75	6 87
Susquehannah,.....	"		6 87
Rye,.....	"	5 00	5 12
Kiln-dried Meal, in hhd.	hhd.	20 00	
do. in bbls.	bbl.	4 37	4 50
GRASS SEEDS, red Clover,.....	bushel.	5 00	5 25
Timothy (herds of the north) ..	"	2 50	3 00
Orchard,.....	"	1 50	2 50
Tall meadow Oat,.....	"	2 00	2 50
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.	18 00	20 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	1	8
HOGS, on the hoof,.....	100lb.	6 50	6 75
Slaughtered,.....	"		
HOPS—first sort,.....	pound.	12	
second,.....	"	10	
refuse,.....	"	8	
LIME,.....	bushel.	33	35
MUSTARD SEED, Domestic,.....	"	5 00	6 00
OATS,.....	"	35	38
PEAS, red eye,.....	bushel.		
Black eye,.....	"		1 25
Lady,.....	"		
PLASTER PARIS, in the stone,.....	ton.		3 12
Ground,.....	barrel.	1 37	
PALMA CHRISTA BEAN,.....	bushel.	2 00	
RAGS,.....	pound.	3	4
RYE,.....	bushel.	85	
Susquehannah,.....	"	88	
TOBACCO, crop, common,.....	100 lbs	4 00	5 00
" brown and red,.....	"	5 00	7 00
" fine red,.....	"	7 00	9 00
" wrappery, suitable ..	"		
" for segars,.....	"	6 00	12 00
" yellow and red,.....	"	8 00	12 00
" yellow,.....	"	9 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"	4 00	5 00
" ground leaf,.....	"	5 00	9 00
Virginia,.....	"	5 00	10 00
Rappahannock,.....	"		
Kentucky,.....	"	6 00	9 00
WHEAT, white,.....	bushel.	1 45	1 50
Red,.....	"	1 35	1 40
WHISKEY, 1st pf. in bbls.	gallon.	38	38½
" in hhd.	"	37	37½
" wagon price,.....	"	33	33½
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 50	
To Wheeling,.....	"	1 75	
Wool, Prime & Saxon Fleeces, ..	pound.	62 to 75	30 to 32
Full Merino,.....	"	52	62 28 30
Three fourths Merino,.....	"	45	52 26 28
One half do.	"	40	45 23 26
Common & one fourth Meri.	"	35	40 24 25
Pulled,.....	"	38	40 25 27

VALUABLE STOCK FOR SALE.

A FULL-BRED Durham short horn yearling BULL, a very superior animal: a 7-8 blood. same age; also two COWS, 4 years old, 3-4 blood, in calf by a full-bred Bull. Pedigrees given in full. Applications for any of the above cattle to be made to the Editor of the Farmer and Gardener by whom the terms will be made known. Letters from a distance must be post paid. June 30th.

BALTIMORE PROVISION MARKET.

	PER.	FROM	TO
APPLES,.....	barrel.		
BACON, hams, new, Balt. cured....	pound.	11	11½
Shoulders,..... do.	"	10	10½
Middlings,..... do.	"	10	10½
Assorted, country,.....	"	9	10
BUTTER, printed, in lbs. & half lbs.	"	18½	25
Roll,.....	"		
CIDER,.....	barrel.		
CALVES, three to six weeks old....	each.	3 00	6 00
Cows, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	2 00	
CHOP RYE,.....	"	1 75	1 87
EGGS,.....	dozen.		
FISH, Shad, No. 1, Susquehanna, ..	barrel.	7 75	
No. 2,.....	"	6 75	
Herrings, salted, No. 1,.....	"	4 37½	4 50
Mackerel, No. 3,.....	"	4 50	4 62
Cod, salted,.....	cwt.	2 25	2 75
LARD,.....	pound.	10	10½

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

		VIRGINIA.
U. S. Bank,.....	par	
Branch at Baltimore,.....	do	Farmers Bank of Virginia, ¾a
Other Branches,.....	do	Bank of Virginia,.....do
MARYLAND.		Branch at Fredericksburg do
Banks in Baltimore,.....	par	Petersburg,.....do
Hagerstown,.....	do	Norfolk,.....do
Frederick,.....	do	Winchester,.....do
Westminster,.....	do	Lynchburg,.....do
Farmers' Bank of Mary'd, do		Danville,.....do
Do. payable at Easton,.....	do	Bank of the Valley,.....do
Salisbury,..... 5 per ct. dis.		Branch at Romney,.....do
Cumberland,.....	¾a	Do. Charlestown,.....do
Millington,.....	do	Do. Leesburg,.....do
DISTRICT.		Wheeling Banks,.....do
Washington,.....		Ohio Banks, generally ¾a
Georgetown,.....	Banks, ¾	New Jersey Banks gen. 1½a
Alexandria,.....		New York City,.....¾a
PENNSYLVANIA.		New York State,.....¾a
Philadelphia,.....	¾a	Vassachusetts,.....¾a
Chambersburg,.....	¾a	Connecticut,.....¾a
Gettysburg,.....	do	New Hampshire,.....¾a
Pittsburg,.....	1½a	Maine,.....¾a
York,.....	¾a	Rhode Island,.....¾a
Other Pennsylvania Bks. 1½a		North Carolina,.....¾a
Delaware [under \$5].....¾a		South Carolina,.....¾a
Do. [over 5].....¾a		Georgia,.....¾a
Michigan Banks,.....¾a		New Orleans,.....do
Canadian do.	¾a	

FOR SALE,

A TWO years old three-fourths Devon BULL. He is of fine form and medium size—he has been fed as dry cattle usually are. Having no use for him, his price will be very low. June 9th. SINCLAIR & MOORE.

DALE'S NEW HYBRID TURNIP.

THE subscriber now offers to the agriculturists a new and decidedly superior variety of Turnip, originated by R. Dale, Esq. an intelligent farmer, near Edinburgh, Scotland; it was obtained by unwearied attention in crossing the Swedish or Ruta Baga Turnip; it is superior in size and flavor to the Ruta Baga; is closer and finer in texture; it is as rapid in its growth as the white Flat Turnip. In fact, it includes the great desideratum in the selection of a proper variety of the Turnip which is to obtain the greatest possible weight at a given expense of manure. This Variety seems to be more adapted to this end than any other sort introduced; it will be found superior in quality to any of the White Field Turnips, and keeps longer than any of them, and very near as long as the Ruta Baga—the color is yellow—the shape oblong. Price 25 cents per ounce. The season for sowing is at hand. R. SINCLAIR, Jr.

At Sinclair & Moore's Maryland Agricultural Repository. June. 30th.

THE AMERICAN FARMER.

FOR SALE, at the office of this paper, a few complete sets of the above valuable work—a work which in itself is a perfect Farmer's Library. Gentlemen who may be disposed to possess themselves of a copy will do well to apply early. aug 4

LUCERNE SEED.

FOR SALE ON PLEASING TERMS,

500 LBS. fine quality LUCERNE or FRENCH CLOVER SEED. This is one of the most valuable grasses which has yet been introduced into cultivation in our country, and can be recommended as being particularly adapted to the purposes of soiling, as it is fit for the scythe fully two weeks before the common Red Clover, and can be advantageously cut several times in the course of a season. Persons sowing this species of Clover, should also sow with it half a bushel of eye, or some other grain to the acre, so as to protect it from weeds the first year, or until it attains its wanted strength and becomes sufficiently matted to smother the weeds. The quantity of seed sown to the acre is 18lbs.

ALSO, SCARLET CLOVER, or Trifolium incarnatum, a very early sort, possessing many advantages.

St. FOIN, and BURNET GRASS seed, both highly spoken of for culture in high, dry soils, as improvers of land—which, together with

RUTA BAGA TURNIP, WHITE FLAT, YELLOW BULLOCK, EARLY DUTCH, and many other sorts, all of the best varieties of Turnip Seeds, for field and garden culture, are confidently recommended as of the very first quality, being selected with great care, and due regard paid to their freshness.

R. SINCLAIR, Jr.

At Seed Store connected with this Office.

June 2.

50 BUSHELS OF BUCKWHEAT, suitable for seed, just received and for sale. Apply to June 16th. SINCLAIR & MOORE.

MASTIFF PUPS.

FOR SALE, four Mastiff Pups—deliverable at four weeks old—they can be highly recommended for farm or watch dogs, will be very large and extremely fierce—for particulars enquire at the office of Gardener & Farmer, Light-st. near Pratt-st. July 28, 3t*

A DURHAM BULL—Apply at this office. June 2

TERMS OF THIS PAPER.

1. Price five dollars per annum, payable in advance. When this is done, 50 cents worth of any kind of seeds on hand will be delivered or sent to the order of the subscriber with his receipt.

2. The manner of payment which is preferable to any other for distant subscribers, is by check or draft on some responsible party here, or else by remittance of a current bank note; and to obviate all objection to mail transmission, the conductors assume the risk.

3. Subscriptions are always charged BY THE YEAR, and never for a shorter term. When once sent to a subscriber the paper will not be discontinued (except at the discretion of the publishers) without a special order, on receipt of which, a discontinuance will be entered, to take effect at the END of the current year of subscription.

4. Subscribers may receive the work by mail either in weekly numbers, or in monthly or quarterly portions; or else in a volume (ending in May annually), handsomely pressed, half bound and lettered (to match with the American Farmer) by such conveyance as they may direct: but the 5 must in all these cases be paid in advance.

ADVERTISEMENTS relating to any of the subjects of this paper will be inserted once at one dollar per square, or at that rate for more than a square, and at half that rate for each repetition.

Printed by Sands & Neilson, N. E. corner of Charles and Market streets.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 15.

BALTIMORE, MD. AUGUST 11, 1835.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, AUGUST 11, 1835.

THE CROPS—We have room but for a passing remark or two. On examining our weekly pile of paragraphs on the subject of the grain and grass crops, with a few exceptions of some particular districts, we come to the opinion that very fair average crops have been obtained. In many instances the *wheat* has been unusually productive, and in all cases, whether the crop has been a large or scanty one, the *grain* itself has been bold, and heavy. In our own immediate vicinity the grass of all kinds have been more productive than we ever recollect to have seen it. On the farm of *R. B. Spalding*, at *Greenwood*, we were shewn a few days since a rick of *timothy* of most exquisite flavor and colour, which we should think would weigh 18 tons, all of which, with the exception of about two tons, we were assured by that gentleman, had been cut from a lot which we were also shewn, and which we think does not exceed four acres. Of the state of the culture of his *Greenwood* farm we shall speak again when we have more room.

To the eastward and northward of us, the grass crops, we regret to perceive, have not been so favorable, but we trust the second crop will make up for the deficiencies of the first.

The wheat crop in *St. Mary's* county of this state, has been a "disastrous failure," to use the words of our esteemed correspondent "*Silenus*." This is the more to be deplored as the crops of wheat in that county for some years have been of a similar character. May not these successive failures in this particular crop, arise from the want of *lime* in the soil, and if so, should not the marl beds be put into active requisition? *Marl* and *clover*, or *lime* and *clover*, are the "sovereignest" things on earth to restore healthful vigor to lands laboring under *debility*.

The communication of our correspondent *Silenus* upon the agriculture of *St. Mary's* county,

is worthy of every consideration, and we only regret that motives of delicacy prevented its honored writer from permitting us to attach his name to it. In such communications, proposing as it does to change the entire agricultural system of a whole county, it would always be best, if it could be done, to give to the views of a writer, that moral force which ever attends the worthy. We are happy to find by the tenor of *Silenus's* remarks, that he intends giving, the result of certain experiments now making by him, in most important branches of husbandry, to the public, through our columns, and we hope he will so far overcome his dislike to appearing before the public as to attach his own proper signature to his future communications. We need hardly ask for the present a careful perusal, its intrinsic merit will challenge that.

The communication in this day's paper on the subject of cultivating the *Persimmon* will attract attention. The potato, the carrot and cabbage, and many other of our most delicious table vegetables before they were reclaimed from their wild state, were but indifferent edibles, and why should not the fruit which has attracted the notice of our correspondent, if subjected to the meliorating influence of culture, be as strikingly benefitted as either of the vegetables named. It is the opinion of many writers, that all the varieties of the apple have sprung from the same common parent, the *Crab*, and that their subsequent difference, is the offspring of cultivation; this may be the case, though we are slow of faith, and in saying this, we do not reject the improving influence of cultivation, but incline to the belief that nature wisely provided various varieties of all the fruits of the earth. Go into the forest and you will find numerous kinds of oak, hickory, gum, and numbers of others of the family of trees; these varieties certainly do not owe their existence to the art of man, and why should not the same law which produced these diversified kinds, of the same genus, equally obtain with regard to the fruit tribe. We indulge in theories ourself, but to build up one, though ever so full of plausibility and fancy, we will never lay violent hands on common sense, nor to effect our purpose, will we speculate in visions as unreal and illusory as imaginings can make them. Though we believe

that the *Crab* will remain a *Crab* still, yet we know that its fruit may be deprived of much of its acidity by cultivation, and although it may never be converted into a golden pippin, or a lady's blush, it is susceptible of being greatly meliorated, and hence it is, that we believe in the improvement suggested by our correspondent with regard to the *Persimmon*.

THE NEGLECTED LADIES' SLIPPER.

We see by a notice in the August number of the *Horticultural Register*, that at a meeting of the *London Horticultural Society*, in May, a number of beautiful flowers were exhibited, and among them a *North American Plant*, called the *Ladies' Slipper*, which, it is added, is the most brilliant plant that has ever been brought to England. So the poor neglected *Ladies' Slipper* has found favor at last! Than which, a more beautiful flower, one of richer or more varied hue, does not adorn a garden: but it is common, and that is enough to seal its fate. We have in our view while we are writing this, a giant stalk, of imperial purple flowers, as double as leaves can make them, as glossy as satin, and in the *tout ensemble*, presenting a sight more beautiful than *Cleopatra* in all her loveliness and glory; but still it is but a *ladies' slipper*—an American ladies' slipper, and like the prophet of old, it has to go out of its own country in search of honors.

VALUABLE DONATION OF NEW FRUIT.—We learn from that ably conducted work, the *Horticultural Register*, just published in Boston, that Messrs. Kenrick and Manning, of Massachusetts, have received donations from professor *Van Mons*, of *Louvain*, in *Belgium*, of 93 kinds of pears, during the years 1834 and 1835; and from the *London Horticultural Society* during the same time, of 47 kinds of pears and 4 of apples. Most of these have survived, and are in a thriving condition, and many of them of exquisite flavor, and new varieties in our country.

These valuable donations were received in scions, and as the manner of securing their vitality may be new to some of our readers, we will transcribe from the valuable communication of Mr. Kenrick, what he says on this head. "Many of these scions were much dried up or shrivelled. These were recovered by steeping in fresh water,

ill the moment they had become saturated or swollen to the natural size, when they were grafted or inoculated without delay. While some few required but a few hours, it was absolutely necessary to steep others for a week or ten days."

Various donations, we learn, have also at different times been made, by the same parties, to the Massachusetts Horticultural Society; some, however, with but indifferent success, while others failed altogether of their destination.

In reading the article whence we have taken these facts, it occurred to us that our Horticultural Society, might do immense service to the state and country at large, by connecting with their excellent institution, a Horticultural Garden, and thus place themselves in a situation to receive similar contributions from the various kindred associations in Europe. We, with all proper deference, merely throw out the suggestion, and shall leave it with those whose province it is to act in the premises to dispose of it as to them may seem fit and proper.

CLOVER IN N. CAROLINA.

The *Farmer's Reporter*, published at Salem, North Carolina, contains the following gratifying intelligence. We say *gratifying*, because it shows that the farmers in that part of the patriotic state which gave birth to the Mecklenburgh declaration of independence—the first written declaration on record—has at last commenced the good work of regenerating the soil, and in so doing have laid hold of one of the most efficient agents known to husbandry. We say again, we are *gratified*, for without affectation we can affirm, that to the improvement of the soil, we are wedded by an affection which recognises no medium, and rejects all compromise. The example thus nobly set, we fondly hope may prove contagious, and spread throughout the state.

"Clover.—We are pleased to state that several of our farmers have engaged somewhat extensively in the cultivation of clover, and the results have been very flattering. One of these gentlemen has secured twenty good loads of hay, and intends to persevere in the cultivation of this valuable grass, for which purpose he is maturing a considerable quantity of seed.

We hope that these gentlemen will not only continue to receive a rich reward for their labors, but that their example may stimulate others to adopt a similar course, by which their land may be considerably improved, and consequently increase in value."

We were shewn last week as fine a specimen of the cucumber as we recollect to have seen for many years. It was raised by Mr. Israel Haycock, who resides on the farm of Mr. Pilkington Codd, near Owings' Mills, in Baltimore county, and mea-

sured $13\frac{1}{2}$ inches round the girth, $13\frac{1}{2}$ from point to point, weighed 5lbs., and had not evidently attained its full size. Mr. Haycock, we learn, is one of your thorough-going Pennsylvania farmers, who with the *plough, lime, clover, plaster* and the *rotation* of crops, would make a desert smile. He is a tenant on the farm he now occupies, but, unlike many others of his class, understands the true policy of a person occupying his relation, and acts upon the correct principle that every dollar which he lays out in manure will come back to him, during his lease, accompanied by compound interest. By the bye, if other tenants on farms would follow his example, we should not have our sight so often offended by worn out lands. Too many act on the erroneous supposition, that, to *take all out, and put nothing in*, is the plan by which they will make money out of hired land, than which man never conceived a more absurd or unsound notion. If tenants would but sit down and calculate with Mr. Haycock, that by applying a few bushels of lime, or ashes, and occasionally turning in a clover lay, they will double if not treble the capacity of the land for production, they would not hesitate an instant in rejecting their former misconceived views, and act on those of a more rational and philosophic nature; on those which teach them, that when crop after crop is taken out of the soil without returning it any nourishment, exhaustion must be the inevitable consequence. Man nor beast cannot toil without food to replenish the demands made upon his system; neither can the earth continue its fruitfulness unless that which is drawn from it to sustain the vegetation taken from its bosom, is replenished by appropriate matter to be converted into nutriment for the plants which are to compose the succeeding crops.

We thought we could not do less than pay this passing compliment to the intelligent course of Mr. Haycock, and in doing so, were led to extend our remarks beyond our intended limit.

We have seen it estimated that if the oats, with which horses are fed were broken in a mill, that three bushels would go as far as six, or in other words that there would be a gain of one-half the food as it is now consumed by them. We are fully sensible that a great saving would result from reducing not only the oats, but all other grain which are fed out to horses or other animals, to something like the state of meal; but we should think that one-third would probably be nearer the rate

of saving. No one who has ever noticed the large quantity of whole grains of corn which are voided by cattle, can doubt for a moment as to the propriety of reducing such food to a substance more easily digested, and we have often wonder-

ed that persons having large stocks did not consult a more just economy in the feeding of them. The saving in six months would more than pay for a mill that would last ten or a dozen years. And then again, if all the hay and straw fed on a farm were cut and steamed, the saving would be greatly increased and the comfort of the animals promoted in an equal ratio.

STRAW CUTTERS AND OTHER AGRICULTURAL IMPLEMENTS.

We spoke in another paragraph of the great saving which would accrue to the farmer or planter, by cutting the hay and straw with which he may feed his stock, and we will now call his attention to the several machines at present mostly approved of.

There is the 20 INCH CYLINDRICAL STRAW CUTTER, suited to horse or water power, and competent to the cutting of from 75 to 100 bushels per hour. This, on a large estate, where time is emphatically money, would be found of immense value.

Of the same construction, there is the 14 INCH box, suited to manual power, and the 11 INCH box, also adapted to manual power; and both in high repute with agriculturists, being easily kept in order and of great capacity. They are all self-feeders, and from the peculiar form of the knives and mode of application to the straw or hay to be cut, can be worked a long time without sharpening, which circumstance is of itself of decided advantage.

And then there is the common Dutch Straw Cutter with and without treadle, whose good service is familiar to a large number of farmers.

These several kinds range from \$75, \$45, \$27 to \$20, and even so low as \$5.

When so much convenience is to be secured for such a small sum, with a positive certainty of saving one-third the quantity of feed, no farmer or planter should hesitate a moment, if he has not already done so, in supplying himself with a machine.

But while we are enumerating other inventions we must not omit to name the Straw cutter recently introduced by a Mr. Secor, a neat, convenient machine, which appears to combine both the economy of time and power, and although a stranger among us, comes well commended to public favor.

Of ploughs, there's the *Self-Sharpening*, the *Wood's*, the *McKormick's*, the *Sinclair & Moore's* improved, the *Bar Share*, the *Hill Side*, the *Shovel Plough*, the *Cary Plough*, the *Buffalo Plough*, (an approximation to Mr. Jefferson's

plan)—these, of all their various, numbers, sizes and prices, have been so improved of late as to leave but a barren field for future essayists, in improvement, to glean in.

Nor should we here omit to mention that most excellent implement the CULTIVATOR, which though neither plough nor harrow, answers a better purpose than either for *cultivation*. This is a machine which we fear is not sufficiently known; for of a certainty, it is one of the best things introduced into the business of husbandry for fifty years, and deserves a conspicuous place on every farm.

But to conclude our article—we would in an especial manner, call the attention of every raiser of corn, throughout this land of mountain and dell, of endless rivers and countless lakes, to the corn sheller; for in verity it is the most potent little labor-saver we have ever seen. We allude to the one with a vertical iron wheel, with spring holders, competent to be adapted to the size of any ears. These by hand will shell you out from 15 to 20 bushels of corn in an hour, and it does its work so notably and with such becoming cleanliness, as to take every grain from off the ear. From witnessing its operation the other day, we should think it would cure a lazy fellow of the ague and fever, who would feed it for a day.

But then we have our misgivings about recommending so *positive* an *innovator* upon the good old-fashioned customs of the country. One thing is certain, that wherever one of these vertical gentlemen may shew his face, there will be an end to those delightful corn-husking and shelling squeezes, whose discordant sounds and boisterous revelry come down to us hallowed by the fond associations of an hundred years.

Well be it so, this is the age of invention, and why should not its march be extended to those who cause the fields to teem with vegetable life, as well as to any other class.

But, badinage aside, one of these diminutive machines, by hand power, worked 12 hours in a day—and they do not occupy more space than a flour barrel on its end—would shell 500 barrels of corn in two weeks. What the saving would be, every farmer can calculate for himself, and, therefore, we will content ourself with simply saying, that the other day in witnessing a trial of its skill we were literally astonished; before we thought the ear of corn was fairly in the sheller, it had performed its office and the grains were lying at our feet.

The salt shipped from the Kanawha Salines, during the last quarter, amounted to 506,052 bushels.

WORK FOR AUGUST.

ON THE FARM.

The harvest having been secured, the farmer must turn his attention to getting out his grain; and if the prices are equal to his expectations, let him take it to market without delay; if they are not, and he has well grounded hopes of their improving, let him carefully put his grain away in his barn. But before he comes to the determination to do so, and thereby subject it to the depredations of rats and other grain-eating vermin, let him recollect that he who gets his grain early to market, most generally finds a good price and ready sale.

If his turnips are not in, the farmer should not delay a day longer, but go to work and sow them; not forgetting to be careful in obtaining *good* seed; for without they are fresh, true, and of the right kinds, disappointment will ensue: and in sowing, let him be liberal to his stock.

If he desires to succeed in his wheat and rye crops, it is time the farmer was bestirring himself, in procuring *good* seed wheat, and seed rye. Change of seed every few years is absolutely necessary to secure fair returns: and observant agriculturists say, that, if possible, when you do change your seed, you should, in this country, prefer getting it northward of your own locality, and we can believe this the more readily, because we were assured by a wealthy planter and farmer, from Georgia, a few weeks since, that the seed rye which he procured from this market, yielded him a third more than that he obtained at home.

The late potatoes should be attended to, and time would be well spent in making the young bread-eaters on the farm pull up all weeds going to seed, and put them on the dung heap, *taking care to cover them over with earth*. Turn the young pigs into your orchards to eat up the fallen apples, and with them they will destroy the breeders of myriads of those insects which every spring blights the hopes of the husbandman, and despoil him of his fair proportions of fruit.

If the farmer intends seeding his winter grain in his corn-field, it is time he was preparing himself, if possible, with a top-dressing of ashes. If he should turn in a clover lay for that purpose, the addition of a little lime or ashes would do no harm.

THE KITCHEN GARDEN.

Be careful in eradicating all weeds which may infest your walks, beds and borders, and do not forget, wherever vegetation is in a progressive state, that by keeping the earth open and free to the operation of the atmosphere, you will promote the growth of your vegetables.

Beans for pickles, cabbage seed for collards, and

winter radishes, may now be sown. As the garden hops will be ripe this month, you should watch and gather them in the right time, which is when the chaffy capsules acquire a brown colour, and a firm consistence. Sow your spinach. If you have any trees that were planted in the spring, should the weather be dry, water them at least three times a week during this month, not omitting an occasional dose of good rich soap-suds.

And, as this is the month, too, when attention should be paid to the propagation of that exquisite fruit, and best of all dentrifices, the STRAWBERRY, we will give a few directions concerning the mode of preparing and planting the new beds, and we know not how we can do so with equal effect, as by copying from the American Gardener's Magazine the substance of its conductor's views on the subject.

About the middle of the present month, let the piece of ground, which should be a deep rich loam, be prepared as follows:—If very rich, it will not need much manure; but if ordinary garden soil, it should have about three inches of half decomposed cow or horse manure added; the soil should be eighteen inches or two feet deep, on a good sub-soil. After the manure is spread, the piece should be trenched to the whole depth, the entire length of the bed. If the bottom soil is of a very inferior quality put the middle spit at the top and the lower in the middle. The whole should then be left to settle a few days, or until about the *first of September*. It should then have added, about two inches of well rotted manure, spread on the ground and dug in lightly with the spade. The beds should contain three rows, should be six feet in width and the alleys between each be three feet: the first row should be one foot from the edge of the bed and the rows two feet apart, and the plants eighteen inches apart. Select good strong plants from the nursery bed, with bold buds, choosing the first runners, nearest the old plant. If well planted they will require no other treatment except watering, hoeing and weeding until cold weather. A slight covering of straw or old haulms to protect them during the first winter will be necessary, which should be removed about the beginning of April; after which the weeds should be kept clear from the plants, and as soon as the plants are set, a little loose straw should be placed between the rows for the tresses of fruit to lie upon and protect them from the dirt.

THE FLOWER DEPARTMENT.

Such flowers as were not reported before, should be now attended to, and those pots where the

young plants are vigorous should be changed for larger ones. Too much care cannot be paid in turning out the balls of earth to keep them whole, and thus avoid disturbing the roots.

It is time to examine into the condition of your hot-house—let the walls be white-washed and the wood-work painted.

The myrtles, oranges, lemons, and oleanders, which were headed down in April and May, should be now carefully examined, and pruned of all superfluous shoots. Attend to your *geraniums*, and prune and repot them.

This is the proper time for repotting various bulbs, as the *calla aethiopica*, *Richardia aethiopica*, the several species and varieties of the *cyclamen*; the *lachenalia* in its varieties and species; so of the *oxalis*, the *ornithogalum*, &c.

The utmost care must also be paid to watering and syringing the plants.

The carnations and pinks that were layed down in June, if they have been well attended to, are now sufficiently rooted to be cut asunder and transplanted.

The bulbous roots must be examined, and those requiring it, planted out.

Evergreen hedges should now be clipped and dressed: and in fine, now is the time both to sow and save the seed of many valuable bulbous rooted and other flowers, and it should not be permitted to escape unimproved.

REMARKS

On the wheat crop and general agriculture of St. Mary's County, Md., together with suggestions on the propriety of changing the present system of culture, and of adopting that of the four shift or rotation of crops.

Saint Mary's county, July 18th, 1835.

E. P. Roberts,

Sir—You ask me the condition of the crops in this part of Maryland. The only crop of which any conclusive estimate can be formed at this season of the year is the wheat, and that being now harvested, and generally secured, no question remains that it is a disastrous failure—I say disastrous, for at no period within my recollection, has there been so great a scarcity of grain as at present. The corn crop has been for the past two seasons, short throughout the country generally, and in this county unusually so the last year. This, in connection with the severity of the last winter, has produced here, in many instances, a condition of positive embarrassment.—This state of things is well calculated to give rise to the most sober musings with regard to the policy of our agricultural management—at no period, however favorable the season, is the crop of corn believed to be adequate to the demands of the county. Is such a state of things judicious in an agricultural community? Should we trust to the caprice of the market, depending up-

on the extent of the supply as contrasted with the domestic and foreign demand, for a necessary rendered indispensable by our system of management? But it is contended that the deficiency is easily supplied by an inconsiderable draft upon the tobacco crop, (our staple) and that it is not a matter of serious anxiety. It is true that, when the crop of corn is generally pretty fair, we suffer no serious inconvenience. But suppose a failure, as was the case the last year, in those portions of the country from which we derive our supply, as well as our own, what is the result?—I answer serious embarrassment—for when the account of corn, at the high prices which it now commands, and other indispensable expenses, comes to be met by the proceeds of the plantation, the balance will most likely be found upon the debt side, and the proceeds of the tobacco and wheat, which we expected to apply to the settlement of some debt contracted, perhaps, with the view to the enlargement of the general stock, are entirely absorbed by plantation expenses. The theory, therefore, which has been too long practiced upon by most of us, that we can employ labour, time and attention, more advantageously in the culture of tobacco to the neglect of many crops which are essential for the support of the family and plantation, is not sustained by experience. It often occurs that, when corn, meat, and other necessities for the hands and other plantation requirements, have to be purchased, and if wanted they must be had at any price, the demand for tobacco is limited and the price down—yet there can be no delay, these articles must be had or the plantation stops—the tobacco is of consequence sacrificed. But again—the tobacco crop is liable to casualty and sometimes fails. Where then is the dependence? The necessary demand for food for hands and stock, must still be met or the plantation operations cease—credit becomes the panacea—we draw upon the commission merchant or others—our demands are met and we are content. The ensuing crop may possibly square us, and so we remain without advancing the general stock. Are we willing to stand thus stationary, and after having passed through the ordinary circle of a life, be found to have been toiling for a mere support, a mere living, with not even the redeeming pleasure of handing our estate down to those who succeed us, improved by a skilful system of husbandry, but positively poor, except perhaps the favoured spot upon which the tobacco plant rose in luxuriance and beauty, and waved in the breeze its dark green leaf, in seeming pride, as if conscious of its superiority over its sickly and less favoured neighbours? I trust not. I hope the time has come when we shall review our system—when we shall look to general improvement, instead of concentrating, year after year, the whole resources of the plantation upon one particular spot, the “tobacco ground.”

We have abundant resources of improvement either within ourselves, or which may be obtained at a moderate expense compared with the benefits rendered—and as if Providence had been specially indulgent to us, we have soils upon which Plaster of Paris acts efficiently; and where plaster does not act, we have lime (oyster shell) or sea-weed. But the objection started is, we have not labour—the tobacco crop consumes our entire time. I reply, diminish it for the present,

and apply a portion of the hands to the improvement of the corn fields. Indeed I am satisfied that it would be better to discontinue the culture of tobacco altogether for the present, and until the land generally is sufficiently improved to enable us to produce better crops of corn and wheat. While we might feel the loss of the crop of tobacco for a year or so, we would have the satisfaction to know that if we had less to sell, we would have nothing to buy, and the land gradually advancing in intrinsic value. When the fields had become so enriched as to sustain themselves by their own intrinsic means by a proper system of rotation and clovering, we could then return to tobacco with some expectation of profit. If there be scepticks in improvement by a proper system of management, I would refer them to the farm of Mr. James Selden on James River, Va., as reported in the 38th No., Vol. 15th, American Farmer, and many others in the same region of the state.

In 1816, Mr. Selden took charge of the estate containing 250 acres of arable lands. Previous to this period it had been managed under the disastrous system of three fields, and the annual average crop was from 300 to 400 bushels of wheat, and from 100 to 120 barrels of corn. He very sensibly concluded that something must be done to resuscitate his land or his labour and attention would be unprofitably employed. His discernment at once prompted him to adopt the four field and fallow system with clover as the most certain, and at the same time economical mode of improvement.*

The crops after this change were in every rotation increased to double, and in a very few years to five to six times the quantity. Mr. Jno. A. Selden had the management of it from 1823 to 1829, and during that period the crop of wheat averaged from 2000 bushels, and the corn in proportion.—One year he made 2400 bushels from 100 acres and 500 barrels of corn, a part of the corn from a small piece of swamp land. The estate is represented as being capable of producing in 1833, 30 bushels of wheat to the acre and from 7 to 10 barrels of corn—under the system as adopted, one half of the arable land would be in wheat each year—one fourth in fallow and one fourth in wheat after corn. He found from experience that the corn land produced only half the crop of wheat of the fallow—estimating then 60 acres of fallow at 30 bushels, and the same quantity of land in wheat after corn at 15, the result would be,

Fallow,	\$1800
Corn land,	900
	\$2700

Compare this with the trifling crop as made

* The rotation of the four shift or field system is this:

- 1st, Corn.
- 2d, Wheat.
- 3d, Clover.
- 4th, Wheat.

I have myself just commenced this system, and I shall give a faithful account of the result, which I shall be enabled to do very satisfactorily, having kept an account of the expenses and profits of the plantation for the last 3 years under the ordinary course of the neighborhood.

previous to 1816, and how rich and inviting a reward for his industry and skill. But contrast this with a tobacco plantation of the same extent, (250,) managed as was Mr. Selden's previous to 1816, which is precisely our mode apart from the tobacco crop, and see the result.

Wheat, 500 bushels, \$500
Tobacco, 20 hogsheads, 800

The only disposable produce, \$1300
Corn, 100 barrels.

It must be admitted that I have rated the produce of a tobacco plantation with us, on tide water, of that extent at the full average product.—But on a plantation more hands are required, and consequently more corn and meat. 100 barrels of corn would not be sufficient for its support, and it would require at least 50 barrels more, at \$3, \$150

Increased number of hands required for tobacco, four at least, at \$50 each, \$200

Deduct this sum, 350
From the above surplus, 1300

Nett, \$950

Produce of the improved farm:
2000 bushels of wheat, \$2000
150 barrels of corn to be spared at 2⁵⁰/₁₀₀, 375

\$2,375
Deduct the nett product of the unimproved plantation as above, 950

Balance in favor of the improved farm, \$1,425

But it may be said that there may have been something peculiar in the soil of Selden's estate—the soil is good and other advantages great. But there are soils here not inferior, and possessing advantages of lime, &c., which, I believe, he had not—this remark is peculiarly applicable to a large portion of the eastern shore of this state. But lest a doubt of our inability to attain to so high a degree of improvement should arrest our energies, and well may we doubt who have been habituated to look upon impoverished fields, and have never tried the advantages of such a system, I will put the product of an improved farm, at a ratio which must place it beyond cavil. Instead then of estimating the product at 30 bushels for fallow and 15 for corn land, I will put it down at 12 bushels of wheat per acre. By adopting the system as pursued by Mr. Selden, no one can suppose that any advantages which he possessed over those we enjoy, could make so great a difference. I believe we stand at least upon equal ground.—But I am disposed to place this system in the least imposing form, and yet, by contrast, to show its decided advantages.

Say then 12 bushels per acre on 125 acres, which would be the quantity in wheat under the system of four fields, 1500 bush. \$1500
150 barrels of corn to spare, rating it at 5 barrels per acre, at 2⁵⁰/₁₀₀, 375

Nett, 1875
Product of the unimproved tobacco plantation, 950

Balance in favor of the improving system, \$925

But it may be said, as I have intimated before,

that whilst the farm is in progress of improvement, we would lose by the abstraction of the tobacco crop. While I believe the exemption of the necessity of purchasing corn, which would be the case from the moment we commenced applying manure to it, instead of to the "tobacco ground," extensively, and a protection from the sacrifice of other crops for the purchase of so indispensable an article, would in most instances be nearly an equivalent to the loss, especially as the crop of wheat would commence improving simultaneously with the adoption of the system, and would, the fourth year, be doubled, as is the result of the experience of all who have adopted the system, so far as my knowledge has extended, and which then, with the corn to be spared, would exceed the product of the unimproved plantation, and would from that time be bringing in an increasing surplus revenue, yet there can be no question that the increased value of the land with the improvement of stock would more than four times compensate for any loss which might be temporarily sustained—unimproved land is not worth more than \$20 per acre.

250 acres, \$5,000
Improved to the extent proposed, and it would command double, 10,000

Increase of actual capital, \$5,000

But, sir, I have inadvertently said much more upon this subject than I intended when I took up my pen to reply to your simple inquiry. My purpose was to impress upon the planters of the county the necessity of adopting some plan by which this destructive canker, this ceaseless purchasing of corn, which is corroding our private resources and breaking down the wealth of the county, would be arrested. The mode above proposed seemed to me the most expeditious, while it is certainly the most economical and permanent. If there be any who object to so radical a change, I will then suggest a moderate modification. We depend too much upon our corn. The corn house is opened for every description of animal on the plantation which may require to be fed. Our hogs consume the greater part. Meat must be raised or bought, and we generally prefer to buy the corn. That a large portion of corn, particularly that which is used in raising hogs, may be superseded by the use of roots, I do not doubt. The objection to roots is, that those which have been attempted here as valuable for stock, are slow in their growth, requiring much labour in cultivation, and are not certain. The common turnip is rapid in its growth, requiring but little cultivation, but it is not valuable for stock. The Ruta Baga is unquestionably valuable, but it is uncertain, being liable to be killed by the fly or the heat of summer, and its growth is so slow as to require great labour and attention to keep down the grass and weeds. The same may be said of most other roots either in part or in the whole. I have this year, however, made an experiment on mangel wurtzel, and so far as I can judge, never having seen any before, the result promises to be highly satisfactory. It was planted on 11th April, in ridges 2 feet 6 inches apart and from 6 to 8 inches distance on the ridges. So rapid has been its growth, the leaves now meeting, as to have required but little cultivation to

keep down the weeds. I hope I have introduced the great desideratum in roots. No insect assails it, it is planted at a season of the year when seed vegetate quickly and certainly, and it requires but little cultivation from the quickness of its growth. The great objection then, to Ruta Baga, Carrots, Parsnips and Potatoes, is I think obviated in the Mangel Wurtzel. I hope to see it at some time generally introduced among us. When the crop is harvested I will give a detailed account of the cultivation, and the result, and the uses to which I shall apply it. The cultivation of grasses is also very important among us as a means of saving corn, and the improvement of stock. But I shall say no more—already has this communication been, perhaps, injudiciously extended. It is the first article I ever penned upon any agricultural subject, and I was not aware of my disposition to say so much. There is a view in which the subject of the improvement of our worn-out lands may be presented of vast importance to every citizen of Maryland who feels an interest in her political destiny. It is the political aspect it assumes, in connection with population, in regard to her political influence and power in the national councils. But as I before remarked, I will say no more. SILENUS.

[For the Farmer and Gardener.]

The effects of the last winter on our peach trees, considerable numbers of which have been killed, have caused the following thoughts to be agitated in my mind. The peach is a native of Persia, and was, doubtless, intended by nature for cultivation in those climes, where the vernal season commences and progresses toward the summer, without a revisit of the frost of the winter. But in the United States, the early spring is not a season of this kind; and at our latitude of 39 degrees, every fruit tree blooming before May, is liable to have its produce nipped by the cold. Now if we would cultivate the peach, should we not seek out those varieties which blossom latest?

But, I think horticulturists had better turn a considerable portion of their care, to the rearing of our native fruits. The persimmon, the wild cherry, and the native mulberry, chesnut and walnut, are trees whose stems are never hurt by our winters, nor the blossoms by the frosts of the spring. The persimmon appears to me to be a fruit capable of being made by cultivation a most luscious one—I doubt whether the peach in its wild state, is superior to our wild persimmon. The wild cherry by manuring, grafting, and impregnation of its flowers with some other blossom, could certainly be enlarged in its fruit, and possibly might be made to bear as large and palatable a product, as an Isabella grape-vine. Change of soil has a great effect in changing the fruit of a tree; suppose then some enterprising horticulturist, would have persimmon and wild cherry trees brought from a distance of 50 or 100 miles. But it is useless to specify means, by which the nature of fruit is changed, since your readers are well acquainted with this subject—however, there is scarcely any alteration made in the state of a fruit tree, or of its soil, but which will effect a perceptible deterioration or improvement of its produce; and the mingling of blossoms offers a certain method of forming new varieties. What a wide field is open for our curious and practical farmers—

what a favor might be rendered to our nation, by presenting it with a persimmon tree, bearing fruit the size of an apple, and as finely flavored as is even the wild product. **UTILITY.**

PROPERTIES OF MULES—HOW TO CHOOSE, &c.

The following extracts from a letter from a distinguished gentleman of Kentucky, who is extensively engaged in the breeding of mules, contains many valuable hints with respect to the selection of this valuable animal, for particular services. The experience of a practical farmer of superior intelligence, in matters of this kind, are of the very first importance, and hence we feel assured our readers will thank us for translating the following to our columns:

"If you think of purchasing them for your own use, first determine whether you want them for the plough, wagon or harness.

If for tilling the earth, look at the quality of your soil. If for light, sandy soil, or the rapid motion of a carriage, or light vehicle of any kind, select them tall with round but slender bodies, with flat, boney, sinewy legs, with rather short thin ears, a clean head and as fiery an eye as possible: in fine, those which most resemble the horse when brought on the turf.

If for tough clay land, or the heavy slow draught of a wagon, select those with the largest heads, the longest flapping ears, the coarsest limbs, the heaviest bodies; those which most resemble the Jack in every particular, except size. The latter are best adapted to plantations intrusted to overseers and negroes, as they will endure, without any apparent injury, to be beaten and bruised in such a manner as would render one of the former unfit for service for days.

Colts to make first rate mules should never be under 3 feet 3 inches when foaled—if *xtra*, they should be from 3 feet 5 inches to 3 feet 8 inches.

As an *invariable rule* let them have *length of leg*, an apparent excess in that portion between the knee and pastern joints."

MILCH COWS.

In answer to queries put by the Agricultural Society of Lower Canada to Sir John Sinclair.

Cows sprung from the same parents, and reared and fed together, will often vary considerably in the quantity of milk they yield—Cows give less milk when young, or when too old, than they do from four to eight years of age. Cows that are lean give less milk, and that of an inferior quality, that the same cows will give when they are in good habit of body. Cows generally give more milk for two or three months after calving than they do afterwards.

The quantity of butter yielded by cows, depends more on the food given them, than on any particularity of the breed of cattle, and the quality of the butter is greatly influenced by the mode of feeding, and still more by the manner in which the butter is manufactured. Cows that browse on natural pasture, or what is called old turf, do not yield so much milk as the same cows would give when fed on clover, turnips, cabbages, and new herbage; but the milk of the former is of better quality, and yields more and richer butter,

from any given quantity of milk, than that of cows fed on clover, &c. Some individual cows of every breed give richer milk, and of course more butter in proportion to their milk, than other cows of the same breed, and when reared and fed in the same manner. Milk as it comes from the cows consists of oily matter, from which butter is made; *lactic* matter, which forms cheese, and *serum* or whey; and the milk of particular cows of every breed differs considerably in the proportions it contains of these respective substances. But it is doubtful if any particular breed can be pointed out, which uniformly yield more butter than any of the other breeds, except in so far as they yield more milk, or are influenced by climate, the mode of feeding, &c. Much butter, and that of a superior quality, is made in Holland, and particularly in the Province of Freiseland. This seems to proceed from the cattle being fed on meadows where the herbage is of natural growth, and very rich. The cows of Holland give less milk in proportion to their size, than the generality of the Scotch dairy cows; but the milk of the Dutch cows is richer than the other. In Holland the milk is not allowed to stand more than 18 to 24 hours, to cast up cream, while in Scotland it stands double those periods. The consequence is, that nothing but the richest and best cream, which always rises first, is made into butter in Holland; while in Scotland, the inferior cream, which makes inferior butter, is collected and churned with the other. And, above all things, the great attention paid to cleanliness in Holland has a powerful effect upon the quality of their butter.

A cow, kept by Wm. Cramp of Lewis, in the county of Sussex, is mentioned in the fifth and sixth volumes of the communications to the board of Agriculture, as having yielded, in the year 1805, 540 pounds of butter, in 1807 she gave 675 pounds, and in 1808 the same cow gave 466 pounds, avoirdupois, of butter. The Secretary to the board of Agriculture mentioned a cow kept by the Rev. Mr. Hacket, of Beckington, near Newark, that yielded nineteen pounds, avoirdupois, of butter in one week. But he added, that six, seven, or eight pounds per week, were the common returns of the cows in that part of England. — *Quebec Mercury.*

Nurseries—No class of men (except printers) deserve better encouragement than those who invest their capital and employ their time, in furnishing to agriculturists every kind of fruit that the climate will ripen. Horticulture has been shamefully neglected until within a few years. A garden was hardly tolerated on a farm, and fruit, except the spontaneous crabs of a common orchard, were not to be tasted without great price. As the season for safe transplanting is approaching, or already come, we recommend our friends to follow the counsel of old Dombiedikes—"Be aye sticking in a tree, Jock; they'll be aye growing while ye're sleeping." — *London Courier.*

A GRAIN CUTTER.

The editor of the *Zenia, Ohio, Free Press*, of the 2^d ultimo, says that on the preceding Saturday he, with many others, witnessed the operation of a machine invented for cutting grain in

the field by horse power. The machine is attached to a cart, differing but little in its construction from an ordinary horse cart. To the hinder part of the cart is attached a platform extending four or five feet to the right. In front of the projecting part of this platform are a number of knives in the form of saw teeth, about six inches long, pointing forward. The knives are fastened to an iron bar, which by means of a crank and piston receives a lateral motion, which is regulated by the motion of the cart wheels. The horses walk by the side of the standing grain, the platform extends into it, and the grain when cut falls on the platform and is removed in grips of a good size by a man standing on the other end of the platform, behind the cart. He was told the machine had cut five acres in two hours, and from the specimen he saw of its performance, he is not inclined to doubt it. With an improvement to elevate or lower the knife he thinks the machine would be of great utility.

GRAPE VINES.

Are very easily increased by layers, as they readily root at the joints whenever buried beneath the soil. On a small scale, this method is far preferable to increasing them by cuttings, as it is more certain to succeed, and commonly produces in equal time larger and thriffter plants. The present is a very suitable time for performing the operation, which consists simply in burying in the soil, a few inches, some of the prostrate branches at the middle, which will take root, and may be transplanted next spring; each branch by separation in the middle at the roots, will generally furnish two vigorous plants. A sloping hollow of a few inches depth, should be dug previously, to receive the branches when they are buried, so that the surface of the ground may be left even. It is the growth of the present season only which is to be made use of in this operation. — *Gen. Farmer.*

GRAIN FOR SEED, should be selected from the cleanest and most thrifty parts of the field; a constant attention to this will cause a permanent improvement in the kind. By gathering single heads, remarkable for their size, earliness, &c. and propagating from them, improved varieties may be gradually obtained, in the same way that improved breeds of cattle are produced. — *Gen. Far.*

CANADA THISTLES, where they have been suffered to grow, are now rapidly advancing towards maturity; they should therefore be mowed without delay, or they will soon send out clouds of seed and spread themselves in every direction. But no one should rest satisfied with merely preventing their extension. Much the cheapest way of disposing of them is to attack them vigorously and destroy them at once. When they cover a large piece of land, it is easiest to kill them by repeated ploughings. Turning them under seven or eight times during the season will perhaps not be too much. Very few patches will be found to withstand the ordeal of such treatment; and it will be in reality more economical in the end, than to protract the warfare through several summers. If the patch is not completely destroyed the first year, a few plants will lift their heads above the surface the following season; they must therefore be watched, and as soon as they appear,

subjected to immediate decapitation. No root can live when repeatedly deprived of its stem and leaves.—*Gen. Far.*

MISCELLANEOUS

[From the *New England Magazine*.]
SONG.

Blow, gentle gale! my pinnace sleeps
Upon the sea;
In yonder tower, my Ella keeps
Her watch for me!
Ah, lift my snow-white sail,
Thou gentle gale!
Breeze, pleasant breeze! where darest thou?
On beds of flowers?
Come, with their odours round thee now,
Come from their bowers!
And fill my drooping sail,
Thou gentle gale!
Come! lovely wind—a fairer rose
Awaits thy kiss;
On Ella's cheek thou may'st repose,
And faint with bliss,
So thou wilt stir my sail,
Thou gentle gale!
Ah, joy! the waters-dyed,
Far, far away,
Touched by thy unseen pinions, glide,
In merry play;
Fill, fill my shivering sail,
Thou gentle gale!
Thanks, gentle gale! my pinnace rocks—
My streamers fly—
The mists float on, like soaring flocks,
Along the sky;
Press, press my willing sail,
Thou gentle gale!
Blow on, sweet breeze!—a moment more,
And I shall see
Her signal, waving from the shore,
To welcome me;
Rend, if thou wilt, my sail!
Blow, gentle gale!

BENE PLANT.

A certain cure for the Summer Complaint.

The numerous applications for this valuable medical plant, has induced us to raise a number, to accommodate the demand, and it can now be had by applying to Robert Sinclair, Jr., at his seed store, connected with this office. It is thus noticed in Fessenden's *American Gardener*:—A few leaves of the plant when green plunged a few times in a tumbler of water, makes it like a thin jelly, without taste or color, which children afflicted with the summer complaint will drink freely; it is said to be the best remedy ever discovered.

Editors by noticing the above in their papers, may be the means of saving the lives of hundreds of children, the efficacy of the plant being fully tested.

Animal sympathy.—A terrier slut having killed a female raccoon, with a litter of young ones, among the myrtles on Sullivan's island, the young raccoons were brought home by the owner of the slut, which took very kindly to them and began to nurse them. Although it had been three years since she last had pups, the young raccoons soon succeeded in producing by suction a flow of milk

from her teats, and she is now rearing, with parental care, her adopted family.—*Charles. Cour.*

Remarks by the editor of the Farmer & Gardener.

We once knew a similar result in this city, with this difference—the parties were an old lady and her grand-child. The circumstances of the case were these. An old lady, who I think must have been seventy years of age at the time, had a married daughter labouring under an affection of *Phthisis Pulmonalis*, who had an infant at the breast nine or ten months old. The mother became so feeble from her disease, that her physician directed the child to be weaned; the grand-mother with that instinctive feeling which teaches us all to forego our own comfort to promote that of those who are near and dear to us, took the child into her own bed of a night, so that the mother might not be disturbed, and the weaning be the more effectually done. The first part of this good old lady's kind intentions were realised; but although she succeeded in weaning her little grand child from its invalid mother, she was not permitted to escape without paying a forfeit for her temerity in taking one so young and lusty to her arms. The suckling bottle, and pap and pappoon were each night provided, but as Grand-ma could not always be awake to answer to the little fellow's calls, he took it into his head that he would help himself to a portion of that luscious aliment which had once so liberally appeased his mother's hunger; and, *sans ceremonie*, to work he went: he tugged—the source, however, was dry; not a drop of the generous liquid came; but with more than Trojan perseverance he continued his nightly toils, until at last the fortress yielded, and the grand-mother, at her then advanced age, was fairly put upon her milk again, and not only performed the office of *wet-nurse* to that grand-child, but to one which, in the regular "course of human events," a few "little months" added to the number of those ties, which make the winter of humanity delight to hover over the buddings of spring.

FOREIGN ABSTRACT.

London papers to the 1st and Liverpool to the 2d July have been received.

Gen. Zumalacarreñui, the commander of the Carlos forces in Spain, died on the 25th June, in consequence of a wound he received in the battle of the 16th of the same month. Gen. Moreno is said to have been appointed his successor. He was a brave soldier and skilful general, and his loss will be severely felt by the rebel cause. The first battalion of British volunteer forces for the service of the Queen of Spain, under command of Col. Chichester, embarked on the 30th June on board the *Monarch* steamboat for the Spanish coast.

The money market had become firm in Lon-

don and the demand for cotton steady, at good prices.

Charles Matthews, the comedian, died at Davenport June 27th.

His Highness Hassan Pacha, Bey of Tunis, died on the 25th of June.

Lord Durham has been appointed British Minister to the Court of St. Petersburg.

LATER.—Liverpool papers of the 9th July are received.—A conspiracy to assassinate *Louis Philippe* had been discovered and prevented.

The affairs of the Carlists in Spain is in a bad way owing to the death of the commander in chief and the indirect intervention of England and France. A conspiracy to overturn the throne of the Emperor Nicholas was discovered in St. Petersburg in the month of May, and more than 60 persons engaged in it arrested.

MARKETS.

Liverpool, Tuesday, 7th July, 1835.

The business of our cotton market last week passed off in the same dull and spiritless manner as it had done for several weeks previous. The sales were 13,000 bales including of American, 130 Sea Island 2s a 2s 6d; 20 stained do 11½ a 15; 3750 Upland 10 a 12½; 4260 Orleans 9 7-8 a 13½, 20 a 14; 2420 Tennessee and Mobile 9 5-8 a 13.

Speculators took about 500 bales, all American, and for export 1100 do and 80 bales Surat, were purchased. The chief sales made in Upland, were from 10½ to 10¾; in Orleans from 10 to 11; in Tennessee, from 10 to 10 1-8; and in Mobile, from 10½ at 11½. We do not alter our general quotations—we wait the return of a brisker demand, to see what that will do for us—in the meanwhile it is proper to remark, that the inferior and middling qualities of short stapled American Cotton have been sold at lower rates; but the better kinds, being scarce, still maintain their ground. Import of the week 25,462 bales.

Sea Island at the public sale on Friday last, went off at a reduction of ½d to 1d per lb; and 500 Egyptian, also brought forward, were withdrawn for the want of bidders. After the sale, about 200 bales were sold at 17½, being a reduction of ½d to 1d per lb. on the rates previously current. Brazils are also reduced in value.

P. S. The sales of Cotton this day about 500 bales; the market flat.

9th July—Thursday—Sales yesterday, 1500 bales—heavy market.

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BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM.	TO.
BEANS, white field,.....	bushel.	2 50	
CATTLE, on the hoof,.....	100lbs	5 50	6 50
CORN, yellow,.....	bushel.	90	91
White,.....	"		90
COTTON, Virginia,.....	pound.	17½	18
North Carolina,.....	"		
Upland,.....	"	18½	19½
FEATHERS,.....	pound.	37	40
FLAXSEED,.....	"	1 25	1 37½
FLOUR & MEAL—Best wh. wh't fam.	barrel.	7 50	8 00
Do. do. baker's,.....	"	7 00	7 50
Do. do. Superfine,.....	"	6 75	7 00
Super Howard street,.....	"	6 50	6 87
" wagon price,.....	"		6 62
City Mills, extra,.....	"		
Do.	"	6 50	6 75
Susquehannah,.....	"		6 87
Rye,.....	"	5 00	5 12
Kiln-dried Meal, in hhd's.	bhd.	20 00	
do. in bbl's.	bbl.	4 37	4 50
GRASS SEEDS, red Clover,.....	bushel.	5 00	5 25
Timothy (herds of the north)	"	2 50	3 00
Orchard,.....	"	1 50	2 50
Tall meadow Oat,.....	"	2 00	2 50
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.	18 00	20 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	8
HOGS, on the hoof,.....	100lb.	6 50	6 75
Slaughtered,.....	"		
HOPS—first sort,.....	pound.	12	
second,.....	"	10	
refuse,.....	"	8	
LIME,.....	bushel.	33	35
MUSTARD SEED, Domestic,.....	"	5 00	6 00
OATS,.....	"	35	38
PEAS, red eye,.....	bushel.		
Black eye,.....	"		1 25
Lady,.....	"		
PLASTER PARIS, in the stone,.....	ton.	scarce	3 12
Ground,.....	barrel.	1 37	
PALMA CHRISTA BEAN,.....	bushel.	2 00	
RAGS,.....	pound.	3	4
RYE,.....	bushel.	85	
Susquehannah,.....	"	88	
TOBACCO, crop, common,.....	100 lbs	4 00	5 00
" brown and red,.....	"	5 00	7 00
" fine red,.....	"	7 00	9 00
" wraperry, suitable	"		
for segars,.....	"	6 00	12 00
" yellow and red,.....	"	8 00	12 00
" yellow,.....	"	9 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"	4 00	5 00
ground leaf,.....	"	5 00	9 00
Virginia,.....	"	5 00	10 00
Rappahannock,.....	"		
Kentucky,.....	"	6 00	9 00
WHEAT, white,.....	bushel.	1 37	1 45
Red,.....	"	1 30	1 37
WHISKEY, 1st pf. in bbl's.....	gallon.	38	38½
" in hhd's.....dull	"	37	37½
" wagon price,.....	"	33	33½
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 50	
To Wheeling,.....	"	1 75	
WOOL, Prime & Saxon Fleeces, ..	pound.	62 to 75	30 to 32
Full Merino,.....	"	52 to 62	28 to 30
Three fourths Merino,.....	"	45 to 52	26 to 28
One half do.....	"	40 to 45	23 to 26
Common & one fourth Meri.	"	35 to 40	24 to 25
Pulled,.....	"	38 to 40	25 to 27

VALUABLE STOCK FOR SALE.

A FULL-BRED Durham short horn yearling BULL, a very superior animal; a 7-8 blood, same age; also two COWS, 4 years old, 3-4 blood, in calf by a full-bred Bull. Pedigrees given in full. Applications for any of the above cattle to be made to the Editor of the Farmer and Gardener, by whom the terms will be made known. Letters from a distance must be post paid. June 30th.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.		
BACON, hams, new, Balt. cured....	pound.	11	11½
Shoulders,.....do.....	"	10	10½
Middlings,.....do.....	"	10	10½
Assorted, country,.....	"	9	10
BUTTER, printed, in lbs. & half lbs.	"	18½	25
Roll,.....	"		
CIDER,.....	barrel.		
CALVES, three to six weeks old....	each.	3 00	6 00
Cows, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	2 00	
CHOP RYE,.....	"	1 75	1 87
EGGS,.....	dozen.		
FISH, Shad, No. 1, Susquehanna, ..	barrel.	7 75	
No. 2,.....	"	6 75	
Herrings, salted, No. 1,.....	"	4 37½	4 50
Mackerel, No. 3,.....	"	4 50	4 62
Cod, salted,.....	cwt.	2 25	2 75
LARD,.....	pound.	10	10½

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	U. S. Bank,.....par	VIRGINIA.
Branch at Baltimore,.....do	Farmers Bank of Virginia, ¾a	
Other Branches,.....do	Bank of Virginia,.....do	
MARYLAND.	Branch at Fredericksburg do	
Banks in Baltimore,.....par	Petersburg,.....do	
Hagerstown,.....¾a	Norfolk,.....do	
Frederick,.....do	Winchester,.....do	
Westminster,.....do	Lynchburg,.....do	
Farmers' Bank of Mary'd, do	Danville,.....do	
Do. payable at Easton,.....do	Bank of the Valley,.....do	
Salisbury,.....5 per ct. dis.	Branch at Romney,.....do	
Cumberland,.....¾a	Do. Charlestown,.....do	
Millington,.....do	Do. Leesburg,.....do	
DISTRICT.	Wheeling Banks,.....do	
Washington,.....Banks, ½.	Ohio Banks, generally 3a¾	
Georgetown,.....Banks, ½.	New Jersey Banks gen. 1½a2	
Alexandria,.....	New York City,.....¾a	
PENNSYLVANIA.	New York State,.....2½a3	
Philadelphia,.....¾a	Massachusetts,.....2a2½	
Chambersburg,.....¾a	Connecticut,.....2a2½	
Gettysburg,.....do	New Hampshire,.....2a2½	
Pittsburg,.....1½a2	Maine,.....2a2½	
York,.....¾a	Rhode Island,.....2a2½	
Other Pennsylvania Bks. 1½a2	North Carolina,.....¾a4	
Delaware [under \$5].....¾a4	South Carolina,.....2½a3	
Do. [over 5].....¾a1	Georgia,.....4½a5	
Michigan Banks,.....5a	New Orleans,.....do	
Canadian do.....5a		

FOR SALE,

A TWO years old three-fourths Devon BULL. He is of fine form and medium size—he has been fed as dry cattle usually are. Having no use for him, his price will be very low.

June 9th.

SINCLAIR & MOORE.

DALE'S NEW HYBRID TURNIP.

THE subscriber now offers to the agriculturists a new and decidedly superior variety of Turnip, originated by R. Dale, Esq. an intelligent farmer, near Edinburgh, Scotland; it was obtained by unwearied attention in crossing the Swedish or Ruta Baga Turnip; it is superior in size and flavor to the Ruta Baga; is closer and finer in texture; it is as rapid in its growth as the white Flat Turnip. In fact, it includes the great desideratum in the selection of a proper variety of the Turnip which is to obtain the greatest possible weight at a given expense of manure. This Variety seems to be more adapted to this end than any other sort introduced; it will be found superior in quality to any of the White Field Turnips, and keeps longer than any of them, and very near as long as the Ruta Baga—the color is yellow—the shape oblong. Price 25 cents per ounce. The season for sowing is at hand.

R. SINCLAIR, Jr.

At Sinclair & Moore's Maryland Agricultural Repository. June 30th.

LARGE WHITE FLAT TURNIP SEED, &c.

JUST RECEIVED,

550 LBS. large white flat and Red top TURNIP SEED, (growth 1835,) raised at the Clairmont Nurseries, by R. Sinclair, Senr. from the finest and best shaped roots. The perfect success of Turnip crops produced from this seed for the last 8 years, and the general satisfaction expressed by those who have tried them, added to the increased annual demand for the articles from Eastern Seedsmen and others, is sufficient proof of its superior quality.

It is recommended "to sow the seed of either kind the 10th a 25th August, on new cleared land, or well tilled clay or loam—quantity of seed required to crop one acre of ground ½ to 1½ lb.; if the latter quantity is sown it will be necessary to cross the plants with a harrow, after which follow with hoes, leaving the plants about 12 inches apart." For further information relative to preparations for seed, cultivation, &c. see R. Sinclair's remarks on Turnip crops in the American Farmer, vol. 8, page 128. Price \$1 per lb. and a liberal discount to those who purchase to sell again.

Also, early round Dutch Turnip Seed, Norfolk or large white, white Tankard, yellow Bullock, Ruta Baga, and Dale's new Hybrid Turnip Seeds, at 75 cents to \$2 per lb.

PICKLING CUCUMBER SEED of the best sorts, Endive, Brussels Sprouts; Lettuce of various sorts, among which are brown Dutch; large white Cabbage and Cilicia—the three most esteemed sorts, YELLOW TURNIP, RADISH, and BLUE CURLED GREENS, or DELAWARE DALE, a superior sort, of fall sowing—both of the latter articles were raised by Robert Sinclair, Senr., with his usual care, from plants selected expressly for the purpose.

R. SINCLAIR, Jr.

At Sinclair & Moore's Maryland Agricultural Repository, Light st. near Pratt street wharf. au 11

CABBAGE SEED, &c.

FOR SUMMER AND FALL SOWING.

JUST received, an additional lot of Early York Cabbage Seed of the Scotch short stalk variety, imported from Edinburgh. This cabbage is full as early as the English Early York, larger head, very dwarf, and is decidedly superior to all early cabbage seed for fall sowing. Also, Early dwarf Paris, Early Battersea, Early George, Flat Dutch, Savoy and other Cabbage Seeds. Large Holland Cauliflower and Kale Seed, of various sorts, among which is the Delaware Kale, the best sort for fall sowing, color dark green, tinged with purple, the leaf tender and curled.

IN STORE,

Corn Salad, Curled Endive, early Curled Cilicia, brown Dutch and large white head Cabbage Lettuce seeds; black and white Spanish and Yellow Turnip Radish seed for fall sowing, the latter a superior new sort, and will produce well if sown out at any season of the year.

Will be in store in a few days, the Pye Plant or Tort Rhubarb seed, producing a very choice vegetable, and should be cultivated in every garden.

R. SINCLAIR, Jr.

aug. 11

At seed store connected with this office.

THE AMERICAN FARMER.

FOR SALE, at the office of this paper, a few complete sets of the above valuable work—a work which in itself is a perfect Farmer's Library.

Gentlemen who may be disposed to possess themselves of a copy will do well to apply early. aug 4

50 BUSHELS OF BUCKWHEAT, suitable for seed, just received and for sale. Apply to June 16th. SINCLAIR & MOORE.

MASTIFF PUPS.

FOR SALE, four Mastiff Pups—deliverable at four weeks old—they can be highly recommended for farm or watch dogs, will be very large and extremely fierce—for particulars enquire at the office of Gardener & Farmer, Light-st. near Pratt-st. July 28, 3c*

Printed by Sands & Neilson, N. E. corner of Charles and Market streets.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 16.

BALTIMORE, MD. AUGUST 18, 1835.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, AUGUST 18, 1835.

The correspondence which we publish to-day, on the subject of the state of the agriculture of the eastern shore of this state, will be found to be of deep interest, and although *local*, in its application it is *general*, and will suit any portion of our country where there are exhausted soils, just as well as the particular district which is the subject of the remarks of the parties to it. The same resuscitative means recommended for the eastern shore will answer for all other parts of our country, and we do sincerely hope that wherever *lime, marl, shells or ashes*, can be procured, that they will be used in connection with clover and other grasses, and that no one will omit also to use *plaster* wherever its efficacy is available. On clayey lands where lime, or any of the other first named agents cannot be procured, deep ploughing, clover and plaster, with the aid of the rotation of crops, will go far to make up for the deficiency of the former.

Our esteemed friend, Colonel *Hillen*, presented us some days since with a stalk of timothy, which had grown in a corner of his meadow, measuring 5 feet 9 $\frac{3}{4}$ inches. It was just in flower, and although so towering in its height, it was by no means what might be called a coarse grass. Judging from the appearance of this stalk, and comparing it with the magnitude of others, we presume an acre of such grass would yield six tons at a cutting. We do not instance this with a view of encouraging the idea that any such quantity could be raised upon any considerable body of land; but we do think that by judicious preparation of the soil, due care in the setting of the grass, and subsequent top dressings of ashes and plaster, in the spring, that an average of three tons to the acre might be obtained in any seasonable year. Much greater products have been realized in Europe, and it is fair to presume that what has been, may be done again.

A VISIT TO GREENWOOD.

As we mentioned in our last, we paid a visit to the country residence of Mr. *Richard B. Spalding*, a few days previous to its publication. Mr. S's farm consists of about seventy acres of land, and is situated on the Bel-air, new cut road, just on the north eastern verge of our city limits. It was formerly owned by Philip Rogers, Esq., and never within our recollection was remarkable for anything but its ample supplies of iron ore, which were heretofore, profusely spread over the surface of every field, except for its magnificent mansion, the thrifty and beautiful appearance of the park of oak and hickory, which conceals it from the road, and for the evergreens that adorn the lawn. It is now about four years since it came into the possession of its present owner, and, as may be presumed from the presence of the iron ore, he found it almost an unimproved waste; for with the exception of its garden and a contiguous lot, whose cultivation, alternated, principally, between corn and clover, and whose soil was really incompetent to hold within its bosom the roots of the latter, whenever a hard winter pressed upon its powers of retention.

The residue of the farm was still more discouraging in its character, chiefly comprised as it is, of an admixture of clay, sometimes red and sometimes white, minute atoms of iron ore, gravel, and sand, with, we should presume, a subsoil of clay. The portion thus situated, was far the largest part of the farm, and what rendered it worse, was, that it had but seldom been subjected to cultivation, and when it had been, the ploughing was performed with all proper regard to the feelings of the horses and ploughmen, the latter of whom, no doubt, were highly imbued with the attributes of mercy, as their ploughing most generally bore closer afinity to the scratching of barn-yard fowls, than to the bold, deep ploughing which we meet with in the fertile county of Lancaster, Pa.

Under such disadvantageous circumstances he commenced his labours—manured with lime, ashes, and all the stable dung he could command, ploughed with a strong team of mules, penetrated the earth deeply, and turned over a bold furrow. It is now four years since he began, and he has in the interim reaped several good crops of potatoes, rye, corn and grasses, and at present all his fields

save one, are in grass of one kind or another.—We saw *timothy*, timothy and clover, clover and orchard grass, and we think clover alone. His entire crop of grass this season, he thinks will amount to 50 tons, and as we remarked in our last, from about four acres, he cut 16 tons of timothy, an average crop of 4 tons to the acre: his general average he believes will be about 3 tons to the acre. Off of two of his patches of clover, he has already cut his second crop, and we measured some which were *uncut*, that exceeded two feet in height.

From his fine success with timothy, he is about turning in some of his clover patches with a view of sowing them down in turnips and timothy.

On the apex of a hill in the rear of his dwelling he has a circle of about an acre of forest trees, (which have been purposely left;) these trees have been thinned out so as to leave vacant spaces of from 12 to 15 feet. On a portion of this spot he sowed clover seed, and wherever there was any soil for the seed to germinate in, the clover has thriven well, and given ample proof how easy a matter it would be to create a clover pasture in an open wood, and thus relieve the arable fields from the injurious office of grazing.

In walking over the clover fields, we were very forcibly struck with the immense quantity of clover with which the ground was covered; all in a rapid state of decomposition, and thus, together with the lateral and other roots which are continually decaying, returning to the earth a portion of the strength extracted from it.

Some of these clover fields have been four years in grass and are now thickly set, and in a vigorous state of vegetation, and still yielding full crops of grass.

One of Mr. *Spalding's* patches of corn was of a luxuriant dark green appearance, and promises a prolific yield; the other from being planted late, is small and more backward than judicious farming would justify; it not being planted until the first of June. This delay we learn, arose from causes beyond his controul, and is, therefore, excusable.

On the whole, we were highly gratified with the condition of *Greenwood*, and think its present proprietor deserves great credit for his skill in covering an almost barren soil, with a rich carpet of delicious and nutritive grasses; but we cannot

part with friend Spalding, without saying that we should have been better pleased had we seen more attention to a *fine garden*, as so beautiful a location, so commodious and elegant a house, certainly deserves one, and we do hope that his excellent and accomplished lady may urge him on to the performance of this good deed.

In conclusion we would ask, should not the triumphant success which has attended the efforts of Mr. Spalding act as an encouragement to every other tiller of the earth to go and do likewise?—We say it should, and trust his good example will be followed, for really there is but little, if any, excuse for unproductive lands, when the means of improvement are so abundant.

The difficulties between Ohio and Michigan have assumed again an aspect of threatening, arising, as a statement before us sets forth, from an attempt on the part of two individuals, citizens of Michigan, to defraud another, a citizen of Ohio, out of a pair of horses at Toledo, by repeated annoyances of an illegal and fraudulent character, though in the *seeming* form of legal proceedings. A repetition of these, as it is stated, led to collisions which at last resulted in bloodshed, and a threat to burn the town by certain Michiganians. The statement whence this is taken is evidently written by a person favorably disposed to the Ohio side of the question. We consider it proper to mention this, not with a view of questioning the truth of his representation, but merely of advising the reader of the fact. We perceive that the governor of Michigan has called the legislative council together to take these difficulties into consideration, and sincerely trust that his communication may be marked by moderation, tending by its calmness and dignity to heal rather than irritate the wound which has been so unexpectedly opened anew—and here we would ask to be indulged in the fond hope, that the powerful and gallant state of Ohio may evince by her forbearance, that in feeling her strength, she will not suffer herself to be estranged from the path of peace; but that, as she has, upon all former occasions, manifested her patriotic devotion to the country, so upon this, while with manly firmness she maintains her rights, she will commit no overt act, calculated to impair the peace of the nation, or jeopard the union of the states.

How to take off grease spots from clothing—Wet a small piece of sponge with *highly rectified alcohol*, and rub it on the spot very thoroughly, until nothing can be seen, and the cloth is nearly dry. When the garment can be *washed*, good soap and soft water will succeed in common grease or oil spots; but if any *rosin* or *wax* be present, *alcohol* is indispensable.

INTERESTING CORRESPONDENCE.

Extracts from a correspondence recently held between a gentleman of Baltimore county, formerly a resident of the Eastern shore of Maryland, and a gentleman residing in Talbot county.

—, Baltimore county, May 7th, 1835.

My dear friend—When spending a few days at your hospitable mansion in the beginning of April, while dining at our mutual friend *****s I think I heard it remarked, that the general average of a crop of wheat in your county would not amount to more than seven bushels to the acre, though there were a few estates furnishing exceptions highly honorable to the sagacity and enterprise of their proprietors. After conning this matter over in my mind since my return home, I have arrived at the conclusion, that I must have misunderstood the remark made, as I believe by our valued friend *****, who, if I understood your observation to me, on our way back to your house, was one of those gentlemen who furnished the exceptions alluded to. Such being my present impression, will you be so good as to state to me whether I was right in my understanding of 7 bushels to the acre of wheat, being a fair average for your county. I have an object in making this inquiry, which I trust will be esteemed a pardonable one by our friends in Talbot, who may not have forgotten that I was born and raised on your shore; and spent the happiest days of my life there.

Yours, most obediently,

"Talbot county, —, 17th May, 1835.

My Dear —"

Your obliging favor would have been sooner answered but that when it reached my home, in due course of post, I was absent on the eastern shore of Virginia, whence I did not return until Saturday last, and have been so engaged since, on my farm, that I have not had time to answer the inquiry contained in your's of the 7th inst., until the present moment. You know what an inroad a week's absence makes in a farmer's business at this busy period of the year. So much by way of apology, and now let me say a word or two in reply to the subject of your inquiry, which I know full well is induced by feelings alike honorable to your head and heart.

You ask me if you understood the remark which was made at table, while dining at my neighbor—'s, that the average yield was about seven bushels to the acre of wheat. Your understanding was *substantially*, though not to the *letter*, correct—the remark was, that the general

* In matters as important as those treated of in this correspondence, the public interest seems to us to require that the names of the parties should be given, as those concerned would then have a good opportunity of judging of the value of the opinions advanced. Of the parties to the present correspondence, we can say, that from their standing, experience, and devotion to the cause of agriculture, their statements and opinions are entitled to the most entire confidence.

yield was 7 bushels for every bushel sown, and as we sow about a bushel to the acre, † your understanding was, of course, *substantially* correct. This I regret to say, is a small quantity; but it is the best we can do with our *heart-broken* soil. We have no alternative between remaining contented at *this*, wretchedly as it repays us for our labor and expense, and to going west; for we cannot afford to manure. None of us make manure enough on our farms, and it would cost more than the land would be worth to bring ashes or lime from Baltimore.‡ So you see I have philosophy enough to content myself under what I cannot better, having determined never to remove from the soil where repose the bones of my father, my grand-father and great-grand-father—that is pretty far for an American to trace back, and yet such is the *true* history of the case; for from the window of the room in which I write, I can see the graves which hold the bones of all of them. But this is a delicate key, and I shall get the *blues* if I touch it much longer. So I bid you adieu."

Yr's. sincerely,

"City of Baltimore, May 21st, 1835.

My Dear Friend.—Being in town to day and calling at the post office, I received your highly esteemed favor of the 16th inst., and as I shall be detained in town all day, and am not particularly engaged myself, my better half being occupied with that most agreeable of all occupations—to a lady—shopping, I have sat me down to answer you forthwith, and also to make a further inquiry of you. Your apology for not sooner re-

† A bushel of seed to the acre! We would respectfully ask, whether this quantity is not entirely too small? Our own opinion has always been that the generally received impression, that *thin* land required a great deal less seed than strong clayey or loamy soil, was more hypothetical than well established, either in theory or practice. Do we not on thinly sown wheat and rye fields, see large, if not the largest yields of weeds? We do. Then the question occurs, would the demand upon the nutritive properties of the soil, if the places of those weeds had been supplied by *wheat* or *rye*, been greater than was required to support the former? We believe not, and have always thought that from 1½ to 2 bushels of seed should be sown, and that either would produce a better and a cleaner crop than 1 bushel.—[Ed. Farmer & Gardener.

‡ There is no necessity for bringing either *lime* or *ashes* from Baltimore, the people of Talbot, and, indeed, of the whole of the Eastern shore, have ample resources in their oyster shells and marl beds, to bring their old worn-out fields back to more than their original fertility; but if they had not, they would find their interest, under many circumstances of their locality, in bringing the valuable fertilizing agents mentioned even from this market.—Ed. F. & G.

plying to mine of the 7th inst., was unnecessary, as from my knowledge of your courteous disposition, and punctual habit, I was fully satisfied that you had an *apology*, and a *good one*.

Pray tell me what would it cost you to have marl delivered on your landing per bushel?

What would it cost you to have shells, (for I am told they can be had in abundance) delivered on your landing per bushel?

I am somewhat inquisitive, but as I am *interested* in obtaining the information, you will be pleased to excuse me."

Yours, &c.

"Talbot county, ———, 26th May, 1835.

My Dear ———,

You say you are somewhat inquisitive and must be indulged. You need not have told me you were "inquisitive," your interrogations would have sounded that fact; for you hardly give me time to *draw breath*, after answering your first question, before you pop down upon me with two others, and tell me too that you must be "indulged," as you are "*interested*" in knowing what I can be supplied with shells or marl at, on my landing. Though I can't fathom the source of your *interest* as you are not a *bachelor*, I will indulge you. Marl or shells, I think, would stand at about six cents when hauled out on my fields, the first cost of both, that of hauling the first, and hauling and burning the second being considered; but what farmer among us could stand such expense?

Yours, &c.,

"Baltimore co., ———, May 31st, 1835.

My Dear Friend—I see from your last, that he same playful disposition—the same singleness of heart which characterised your conduct when we were together in by-gone days, at our old Alta Mater, is possessed by you now; and may I be allowed to say that it is the ancient love which still bears you, which is the *source* of the interest I feel at knowing the price at which marl and shells can be delivered on your place: having made this necessary explanation I will say to you in the spirit of our unbroken friendship, that I rejoice most heartily at the glad tidings you have borne to my ears.

But is it not positively disreputable to say that you can obtain so efficient a fertilizer as marl, or burnt shells, and have them placed on your fields at 6 cents per bushel and to suffer those "heart-broken" fields to remain "heart-broken still?" I ask the question, because I am sure you have never seriously reflected on the subject, or such a state of things would not now exist. If your fields are "heart-broken"—they are not suffering that ang which is the immediate precursor of death—it is that heart-brokenness which lovely woman is sometimes made to endure by one for whom she would at any time lay down her life—that heart-brokenness which kind treatment can almost instantaneously obliterate the effect of. Your fields have been worked till they have ceased

to be productive; but they are naturally kind, and a little good treatment will restore them to their original fertility. Is it not worth a trial?—

You talk like a christian and a patriot about the soil that holds the bones of your honored forefathers;—but does not that sacred soil, "hallowed by so many cherished recollections," demand something at your hands? Is it not entitled to some exertion? Does it not merit an effort to bring it back to what it was when your forefathers found it? If no nobler motive should rouse you to action:—if no more praiseworthy emotion should influence the deed—INTEREST reckons you onward—*interest*—that sordid passion, which alike moves individuals and nations.

In using the term I mean no possible disrespect either to you or to a single son or daughter of that glorious peninsula, where first I drew the breath of life. But *interest*—yes, *interest*, calls you to the rescue of those "heart-broken" fields, and if I convince you that such is the fact, I shall insist upon you obeying the call—upon your rallying to the charge.

Figures you know are the most certain weapons to use in matters where dollars and cents are concerned, and after laying down a few preliminary positions and stating a few facts, I shall then, in all courtesy and deference to your superior claims to the character of an accountant, state an account current by which I mean to show, that you stand very much in your own light not to make an effort to improve your land; you need not make a heavy outlay at the onset—improve 20 acres *first*, and if in 5 years it does not yield as many bushels of wheat as 60 do *now*, I will give you my consent to abandon the project as an impracticable one, and should it succeed, then, I need not tell you to go "forward;" for you will impatiently anticipate the word of command.

I will suppose that I have a 20 acre field of yours in cultivation, and submit it to the usual rotation of corn, wheat, clover, clover, &c. for ten years. After stating its probable yield in your present plan of manuring for that period, I will state what, in my opinion it is capable of *being made to yield*, by the same rotation of crops, after being additionally manured with lime, or marl.

According to your account your average crop of wheat is 7 bushels to the acre, and from the information I received from others while on my visit to you, four barrels of corn to the acre is a liberal average, so also one ton of clover. Now I propose that you put 200 bushels of marl, or the same quantity of oyster shell lime, to each acre of this 20 acre field—that is, that you put on 100 bushels per acre the ensuing fall, and another hundred in the fall of 1839, and that

§ The writer should have carried his proposition further, and required his friend to improve 20 acres *every* year for *five* years; to improve 20 acres and wait *five* years to see the result of it is a kind of *standing-still-policy*, which we have no faith in.—[Ed. F. & G.

¶ We think it would be better policy to apply the second portion of 100 bushels of lime, in parcels of 25 bushels each year after the application of the first hundred bushels, that is 25 bushels on

you also continue the application of your usual quantity of manures as commonly made on your farm. Should you do what I recommend, I promise you the following results. Your *twenty-acre* field will yield you 5 bbls. of corn to the acre the first year, ten bushels of wheat the 2d, 2 tons of clover the 3d year, the same quantity the 4th, 8 bbls. corn the 5th year, 20 bushels wheat the 6th year, 2 tons of hay per acre both the 7th and 8th years, 8 bbls. of corn the 9th year, and 20 bushels of wheat the 10th year. Now let me see how the account will stand for the 10 years under the operation of the *old* and the *new* plan of treatment.

Raised on a field of 20 acres *old plan*

1836	400 bushels of corn at 60 cts.	\$240 00
1837	140 bushels of wheat at 125 cts.	175 00
1838	20 tons clover, at \$10	200 00
1839	20 do do at 10	200 00
1840	400 bushels of corn, at 60	240 00
1841	140 do of wheat, at 125	175 00
1842	20 tons of clover, at 10	200 00
1843	20 tons of clover, at 10	200 00
1844	400 bushels of corn, at 60	240 00
1845	140 do of wheat, at 125	175 00

\$2,045 00

The same field manured as proposed, will yield in:—

1836	500 bushels of corn, at 60 cts.	\$300 00
1837	200 do of wheat, at 125	250 00
1838	40 tons of clover, at \$10	400 00
1839	40 do of do at 10	400 00
1840	800 bushels of corn, at 60	480 00
1841	400 do of wheat, at 125	500 00
1842	40 tons of clover, at 10	400 00
1843	40 do of do at 10	400 00
1844	800 bushels of corn, at 60	480 00
1845	400 bushels of wheat, at 125	500 00

\$4,110 00

Deduct as follows:

4,000 bushels of marl, or lime, at 6 cts.	\$240 00
Interest on the $\frac{1}{2}$ for 5 years,	72 00
—on the other $\frac{1}{2}$ for 10 years.	144 00

\$456 00 456 00

Clear amount after deducting cost of manure, and interest, } \$3,654 00

Amount of crops under the old plan, 2,045 00

Clear gain arising from the application of lime or marl, \$1,609 00

Here then, my dear friend, after deducting the first cost of the lime, or marl, whichever you may chose, together with the interest thereon, (and in justice, nothing but the interest is fairly chargeable) you will find that you will have a clear profit of \$1,609, by simply making an outlay of \$240, and that, in two instalments of \$120 at intervals of 5 years, through the means which I propose of im-

the 2d, the same quantity each of the 3d, 4th, and 5th years; by this course the soil would be receiving the benefit of it three years earlier than by the plan proposed.—[Ed. Far. & Gar.

¶ Is not strange that this gentleman should think of ending to Baltimore or any where else for "*limer ashes*," when he has marl and shells at his own door?—Ed. F. & G.

proving your fields, over your present "heart-breaking" operation, of "taking all out and putting nothing in." The produce named by me as well as the prices, are arbitrary, you may probably say—so they are; but the yield under your present plan, you will acknowledge is liberal; and permit me to say to you, I conceive that the increase as laid down by me, is by no means large. The maximum of production in wheat and corn is not 50 per cent., of what has been raised on soils pushed to a high state of fertility. The first I have set down at 20 bushels to the acre, a degree of production, which Mr. ***** and some other gentlemen of your own county, have reached: now, raising forty bushels have been frequently raised in various parts of the country, on richer soils to be sure, than yours, and on soil, perhaps, capable of producing more wheat than yours can ever be made to yield; but then when I assume less than fifty per cent. as my highest amount of production, I think I should be permitted, at least, to affirm, that I require of your ground no oppressive burthen.

But what is my maximum with respect to corn, why 8 barrels—40 bushels—surely this must be allowed to be moderate; it is not one-third of the quantity raised by Mr. Semmes, of St. Mary's county, of our own state, in the year 1834, and it bears still less than that proportion to the quantity raised on an Island in the James River, Va., as reported by Mr. Cabell. Mr. Semmes' yield was 25 bbls. and 1 peck to the acre—Mr. Cabell's 27 1-6 bbls. If then, I task your land less than one-third the quantity which it is within the ability of soil to bear, you will certainly not charge me with being a hard task-master. With respect to the clover, two tons to the acre is so common, and so moderate an amount, that I shall not trespass on your attention in an endeavor to sustain a proposition so self evident.

Do you admit the plausibility of my plan? I think I can see your open countenance brightening up, and your candid tongue exclaiming—"why hang me, you have made me almost a convert"—and if I have not drawn too largely upon my powers of "second sight," I hope to see you in the fall engaged in the noble task of renovating those "heart-broken fields," where "repose the bones of your forefathers." The example of one good man in a neighborhood never fails of doing good. Emulation is a virtue which is the common property of all, and although its good effect is lost upon the degraded, and that men of vitiated minds are not to be influenced by motives such as I have held up, the virtuous will become inspired with the laudable ambition of doing as well as their neighbors, and by this means—by the mere force of example—if you will but set it, you may do an incalculable amount of good. What a delightful source of reflection it would be to you ten years hence to look around you and see a new face put on the cultivated portion of your part of our country—to see those "heart-broken fields" of which you speak in such becoming terms of regret, teeming with luxuriant vegetation through your instrumentality. I am admonished by my paper that I have said enough, and as I have not room to say more, I shall leave the rest to your own good sense. Yours truly.

We insert to-day a communication from John S. Skinner, esquire, and a letter from a distinguished scientific gentleman of this state, on the subject of a geological and physical survey of a very large body of land, more than 50,000 acres in extent, situate in Alleghany county, Maryland, which has devolved on a gentleman of fortune, whose pursuits do not lead him to practical agriculture. This land, it is believed, possesses immense bodies of fine timber, great water power, coal, iron, and rich prairies, eminently adapted to agricultural purposes, there being rich deep loamy bottoms, and hills delightfully covered with luxuriant grasses, most happily situated for grazing. The whole may be had, as we learn, for less than a dollar an acre.

Of the letter of Mr. Skinner, it is so founded in the true philosophy of human nature, and so entrenched in the enlightened principles of political economy, that we deem it only necessary to call attention to it to ensure its being generally read.

THE IMPORTANCE OF GEOLOGICAL AND MINERAL SURVEYS.

To the Editor.—There are suggestions in the following extract, which appear to me to be well worthy of the regard of all who possess large bodies of land. Investigations such as are here proposed would often develop treasures unthought of and inexhaustible, and in proportion as lands in the old states, on this, atlantic side of the mountains, become exhausted of their agricultural capacities, the greater is the necessity of penetrating in search of substances fitted for manure, or mineral resources; the discovery whereof, may afford ample means of resuscitating our farms, or expose new objects of revenue to compensate the loss of agricultural productiveness, and thus arrest the tide of emigration to the west, which threatens to carry beyond the mountains, not only the bone and muscle, but especially the elite of our population. I say the elite, because it is well known that they are the most active and enterprising of mind and body, who can resolve to abandon the familiar scenes of their childhood, and the conveniences of old settlements in search of fortune amidst the privations of a frontier life. Nay it is not only the dictate of self interest that should prompt us to do what we can to lay bare the undiscovered resources of the old states:—the sentiment of patriotism should stimulate to the same end; for is it not obvious that under the potent influence of existing causes the time will very soon arrive, when all the slave holding states along the sea board, notwithstanding their fine climate and great geographical extent will be, as contrasted with the densely populated states of the north, and the valley of the Mississippi, as a child by the side of a giant! and what is the consequence to ensue? When were power and cupidity ever known to respect the rights and property of the feeble? To justify reliance on laws or written constitutions, there must be something like an equality of power! some apprehension of detriment from violation of

the compact; conscience itself is modified by circumstances; remorse is the fruit of education, which makes vice virtue, and vice versa.

The moment that society becomes thoroughly classified by different localities and conflicting interests, it is a law of nature that the weak shall be made subservient to the powerful. If then the old slave holding tide water states would maintain their constitutional rights, they must seek to retain something like their present relative physical strength. In this view of the subject, self interest immediately and self preservation ultimately suggest that every exertion should be made to expose and bring into use all their resources. Yours, respectfully,

J. S. SKINNER.

BALTIMORE, July 19th, 1835.

Dear Sir: I throw hastily upon paper a few suggestions as to the nature of the survey proposed to be made of Mr. —'s lands, in reference to the subject of our yesterday's conversation. It should be made to embrace every thing belonging to the physical geography of the tract; as for example—

1st. Its limits and boundaries—2d. Its superficial extent—3d. The direction and course of its different streams, together with an estimate of the water power which they afford—4th. An account of the extent of cultivated lands, the amount of glade lands, and forest; designating the boundaries of those districts upon which the character of the soil is similar, and upon which the timber of distinct varieties occurs—5th. The extent and boundaries of the different kinds of rocks; the beds of coal, iron ore, fire-proof clays, limestone fitted for the production of hydraulic lime; in a few words, its complete geology and mineralogy, &c.

An accurate geographical and topographical map should exhibit all the above important features in the physical geography of a country, by which means a thorough acquaintance with its resources can be obtained by a simple inspection of the map.

It would be desirable that the map should be accompanied by a descriptive memoir, giving a full account of the various kinds of coal, iron ore, and others, and specifying the probable quantities that might be obtained of them in the several localities. Attention should also be paid to the character of the springs; and should any mineral springs present themselves, their analysis should be made, their medicinal properties indicated, together with the advantages they may offer as places of public resort for health or pleasure, &c.

The memoir should embrace an account of the different soils, their natural productiveness, means of improvement, &c. It should state the quantity of water-power furnished by the streams, designating such as are capable of furnishing efficient power for forges, and such as would suit for smelting-furnaces, &c. &c.

Being at present very much engaged, I have only time to submit these few suggestions or hints, which your knowledge of things will no doubt enable you to carry out to any extent.

I conclude with the remark, that it is my firm conviction a survey of this kind would greatly facilitate the sale of the lands to which it would refer, and in fact enhance their immediate value, by

making known at once all the resources they possess.

The cost of the survey could not exceed two cents per acre, which might be safely calculated to advance the price of the lands from 1 to 2 dollars.

Should you take an interest in the operation and succeed in getting Mr. ——— to consent to its being done, I would be obliged to you to use your influence in obtaining that my friend Mr. P. T. T. be employed for the geological part of the survey. I am willing to answer for his entire competency in every respect.

Very truly, your obt. servt.

DIRECTIONS

For sowing the seed and raising the plants of the White Italian Mulberry Tree.

1. To sow an ounce of seed, prepare a bed 50 feet long and 4 feet broad. Manure it well with a compost composed of $\frac{1}{2}$ d. stable manure, $\frac{1}{2}$ d. ashes, and $\frac{1}{2}$ d. decomposed leaves from the woods, or garden mould; dig deep, pulverise finely, and then lay the bed off in drills 12 inches apart, $\frac{1}{4}$ or $\frac{1}{2}$ of an inch deep; sow the seed as thick as you would onion or parsnips; cover with rich mould, press the mould down gently, but sufficiently to cause the seed to come into contact with the earth; and should the weather be dry, water the seed bed every other evening, it will assist in promoting the germination of the seed and vigorous growth of the plant.

2. Keep the beds clean of weeds; and should they receive an occasional watering with suds or soot and water, say once a week after they are up, if planted this month, August, they will be fit to transplant into nursery rows in April next, or if not desirable to be so removed, they may be permitted to remain until the ensuing spring, care being taken to keep the bed clean of weeds, the earth stirred, and watered in dry seasons.

3. The second year, if not removed before, the plants must be removed into the nursery rows, which must be prepared as for any other crop. The ragged roots being taken off and the tap root shortened, the plants must be planted out 12 inches apart in rows three feet apart, the earth to be well trodden around the plant. As before, the earth must be kept open and free from weeds.

4. At two years old, the plants may be planted out into hedges, at 18 inches apart in rows six feet wide. The ground should be prepared as before directed, and some good rich mould put into the holes, to be pressed around the plant. If intended to be planted out as standard trees, 20 feet square apart would be a good distance; but in that case the plants should not be transplanted until they are about an inch in diameter. In either case they will require trimming and topping, and if kept as hedges should be treated as other hedges are.

ROBERT SINCLAIR, Jr.

To preserve Horse-Radish through the winter. Grate the root down when in perfection, put it in bottles, fill them with strong vinegar, keep them corked tightly, and you may enjoy this grateful condiment with your roast-beef, beef-steaks, or other dishes during the whole winter.

[From the Montreal Herald.]

TO THE EDITOR—*Sir*: In the Herald of the 7th instant your correspondent, Willis Gaylord, gives an account of a crop of ruta бага, or Swedish turnips, which he raised last year; the produce of an acre measured only 450 bushels. In several districts of Scotland where the turnip husbandry is practised to a very considerable extent, 30 tons per acre is considered only an average crop. Indeed, it is no wonder that your correspondent's crop was light, having been raised upon land which had been so imprudently treated for several preceding years. To take three or four culmiferous crops in succession was sufficient to deteriorate the very best land, so much as to render it unfit to produce any thing but root weeds, of which I presume he will find that he has got a liberal share. To preserve land in a clean and productive state, when a rotation of four crops is to be followed up, an intervening leguminous crop is absolutely indispensable. If this is neglected, land of any description will be found to be both exhausted and completely stocked with root weeds, some of which are greater robbers of the soil than any grain crop whatever; to eradicate which and restore the land to its primitive vigour, will be found to be both a troublesome and expensive process. I observe that your correspondent had taken wheat for the first crop upon the lay furrow, whereas farmers of extensive practice always take oats for the first crop. Your correspondent, I observe, had applied dung to the second crop, which of all the crops had least occasion for it, as the putrescence of the grass roots acts powerfully as manure during the progress of the second crop. I apply dung to the turnip crop, which requires manure more than any of the preceding crops. To ensure a full crop of ruta бага, a very liberal allowance of well prepared dung is necessary, nearly double the quantity of what is necessary for any other variety of the turnip tribe. The deficiency of your correspondent's crop should not deter him from practising the culture of turnips.

The turnip husbandry is a correct system of agriculture. By no other system, indeed, could light and gravelly soils be brought to that degree of fertility of which they are susceptible; but unless the different processes which belong to it is timely and correctly executed, the benefit derived from it would be comparatively inconsiderable. This system, however beneficial upon soils of the above description, should never be attempted upon a clay soil or upon soils which are incumbent upon a retentive bottom. The only preparative for a regular rotation of crops upon such soils is a summer fallow, which, in judicious husbandry, is indispensable every six or seven years.

To preserve land either in a productive state or otherwise, depends entirely upon the rotation of crops adopted by the occupier. Should he persist in taking three or four culmiferous crops in succession, as is too often done in this part of the country, the land would unquestionably get into a foul state, as I have already mentioned, and the produce would consequently be scanty, and the land much deteriorated.

I might say a great deal more upon the same subject, but, you may perhaps think I have said enough.

Should you deem these remarks worthy to be

inserted in your valuable paper, I may trouble you with further remarks at a future period.

I am, sir,

Your most obedient servant, J. H.
Haymarket, Montreal, Feb. 12, 1835.

THE CATTLE OF WALES.

To the principality of Wales we naturally look for some trace of the native breed of cattle, for the Welsh were never entirely subdued by any of the early invaders. The Romans possessed merely a portion of that country; the Saxons scarcely penetrated at all into Wales, or not beyond the county of Monmouth; the Welsh long resisted the superior power of the English under the Norman kings; and it was until late in the thirteenth century that the Principality was annexed to the crown of England. We therefore expect to find there more decided specimens of the native productions of this island: nor are we altogether disappointed. Howell Dha, or Howell the Good, describes some of the Welsh cattle in the tenth century, as being "white with red ears," resembling the wild cattle of Chillingham Castle. An early record speaks of a hundred white cows with red ears being demanded as a compensation for certain offences against the Princes both of North and South Wales. If the cattle were of a dark or black colour, 150 were to be presented.—When the Cambrian Princes did homage to the King of England, the same number of cattle, and of the same description, were rendered in acknowledgement of sovereignty. Speed tells us, that Maud de Breos, in order to appease King John, whom her husband had offended, sent to his Queen a present from Brecknockshire of 400 cows and a bull, all white and with red ears. Whether this was the usual colour of the ancient breed of Welsh and British cattle, or a rare variety, esteemed on account of its beauty, and chiefly preserved in the parks of the nobles, we are unable to determine. The latter is the most probable supposition; and the same records that describe the "white cattle with reds ears," speak also of the "dark or black-coloured breed," which now exists, and which is general throughout the principality.

The principal and the most valuable portion of the cattle of Wales are middle horns. They are indeed stunted in their growth, from the scanty food which their mountains yield, but they bear about them, in miniature, many of the points of the Devon, Sussex, and Hereford cattle. We will first consider the cattle of South Wales.

PEMBROKESHIRE, *South Wales*.—Great Britain does not afford a more useful animal than the Pembroke cow or ox. It is black; the great majority of them are entirely so; a few have white faces, or a little white about the tail, or the udders; and the horns are white. The latter turn up in a way characteristic of the breed, and indeed the general form of the cattle undeniably betrays their early origin. They are shorter legged than most of the Welsh breeds, but longer than the Montgomeries, and have round and deep carcasses. They have a peculiarly lively look and good eye. The hair is rough, but short, and the hide is not thick. The bones, not so small as in the improved long horns, are far from large; and the Pembrokeshire cattle mingle, to a considerable degree, and as far per-

haps as they can be combined, the two opposite qualities, of being very fair milkers, with a propensity to fatten. The meat is generally beautifully marbled. It is equal to that of the Scotch cattle, and some epicures prefer it. They thrive in every situation. They will live where others starve, and they will rapidly outstrip most others when they have plenty of good pasture. The Glamorgans would probably get the start of the Pembroke on good pasture; but on the rough and barren tracts, which are to be found in both counties, the Pembroke would decidedly obtain the advantage, and are, therefore, purchased by many of the Glamorganshire farmers. The Pembroke cow has been called the poor man's cow: it is perhaps one of the best cottager's cows, while it is equally profitable to the larger farmer. We shall see, when we come to describe the Anglesey breed, that the original cattle of North and South Wales are essentially the same; they are, however, finer in the head, neck, and breast, than the Anglesey beasts, but not so fine as the Glamorganshire cattle.

The Pembroke are found in Carmarthenshire Cardigan, and Becon, and, indeed, in every bordering county, mixed with the different breeds of each, and imparting to each its very best qualities. They bear no slight resemblance to the Kyloes.

The Pembroke ox is, like the Devon, a speedy and an honest worker,—and fit for the road as the plough,—and when taken from work fattening as speedily as he does. He is not quite so tractable as the Glamorgan, but easily managed if no foolish violence is resorted to. Great numbers of them are brought to the market in London—they stand their journey well and find a ready sale, for they rarely disappoint the butcher; but, on the contrary, prove better than appearance and touch indicated. The Pembroke oxen get rid of their steer-like appearance sooner than most other cattle. At three years old they have generally the true character of the ox about them, and, in their fourth year, they are usually ready for the market. The Pembroke cow is usually black, with occasionally a dark brown, or, less frequently, a white face, or a white line along the back. Mr. Davies describes her as being “fine-boned, with a clean light neck and head, small yellow horns, inclining upwards, good chine and loin, round long barrel, thin, thigh and short legs: she is always in good condition if tolerably kept, and has a rich wave in her hair, and an oiliness of skin, which ever denote thriftiness.” This is true with regard to some of the best cows, but there are many exceptions. With all these good points, proving her value as a grazing animal, the Pembroke cow is, as we have described her, a very fair milker, and will yield 5lbs. of butter per week during the dairy season.—*Sat. Ev. Cour.*

For a Cold and Cough—Take a large handful of hoarhound, one do. of life everlasting, one do. of cumfrey, one do. of elecampane, a handful of camomile flowers, and $\frac{1}{2}$ of an ounce of Indian turnip, and put them in two gallons of water in a new earthen pot; boil it down to one quart, add $\frac{1}{2}$ lb. of loaf sugar. Take of this syrup three table spoonful a day, viz: a table spoonful morning, noon and night. This is an invaluable remedy, and will be found prompt and effective.

BREEDS OF CATTLE IN MAINE, METHOD OF BREAKING, &c.

[For the Farmer & Gardener.]

Mr. Editor—Since you have paid the flattering compliment to a young down-easter, to call on him for a second communication, I will favor you with my opinion on the subject of your inquiry concerning the stocks of cattle in the state of Maine.

1. We have both native stock and crosses of the various improved breeds. We have found both the Durham short-horn and the Devon, also the Bakewell, very valuable. Our farmers generally pay more attention to the quality and appearance of a bull than his pedigree, as their oxen always command a price according to the good qualities they possess. The properties looked for in an ox are, 1. large size; 2. such a shape as will combine, as far as may be, an appearance of beauty, strength and agility and hardiness to endure labour, and aptness to fatten; and 3 a bright red color.

2. I think from two to three years old the most appropriate age to break them, [oxen,] when they are in good flesh and spirits. They should be first used with others that are handy, and taught obedience with as little whipping as possible; they should be very gently used at first, their yokes and bows made to fit exactly, and very smooth; if the weather is hot and they seem to worry badly, they should be unyoked and turned out, lest by over heating, their spirits and constitution should be broken. When they have become so gentle that they may be handled by one man, they may be taken out of the team, and by lightly loading them at first, they may soon be taught to display their strength in any way the driver may please. A good team of oxen with us, will travel from two to three miles the hour, according to the weather, load, road, &c.

3. We generally prefer oxen to horses for ploughing (unless the soil is very light and free from obstructions) carting and other heavy work, as farmers who keep from four or six oxen, seldom have more than one horse, unless they keep brood mares.

4. Oxen are more easily raised, and sooner fit to work than horses; are also less liable to accident. In our grassy country, they are more cheaply fed, as they require less grain to keep them in flesh. I believe them less expensive in their gears and more readily shifted from one sort of work to another, and when too old to work can be fattened and sold to good advantage.

5. On account of their steady and regular movement, and patience under toil, the facility with which many pairs are attached to the same load, or changed from one load to another, they are considered highly more valuable than horses by our farmers.

6. As the breeders in England frequently had but one or two objects in view when they improved their breeds, on account of their stocks being for some particular use, either for beef, work, or dairy, and as our stock is used for all these purposes, we want a combination of the good qualities of each, hence we find it useful to cross with different breeds.

Such, dear sir, are the ideas of one who has spent more hours at tending oxen than at school,

if they prove useless to your readers I hope they will also prove harmless.

LEWIS ARMSTRONG,
of Winthrop, Maine.

Balt. July 3d, 1835.

RELATIVE EXPENSE, Of Animal Labour, as performed by Horses or Oxen.

Animal labour is one of the most important items in the expenses of the farm, whether performed by horses or oxen; but as it will readily be admitted, there is a difference in the amount, as performed by the one or the other, and that difference I conceive to be altogether in favor of the latter.

The horse is universally conceded to be one of the most expensive animals kept on a farm. In order that he may be kept in condition for work, it is necessary that he should have a great deal of the best food together with a warm stable, and hourly and almost constant attendance, while the ox requires as little and as plain food as any other animal of its size, and less attendance. The horse is more liable to disease and casualty than any other animal; the ox less. It is a very common thing for the farmer to lose a horse, but a very rare one to lose an ox. Likewise, the horse, when arrived at maturity, or an age which fits him for a farmer's team, begins soon to depreciate in value, and is at length worth little or nothing more than his hide—while the ox at any age, if fat, is worth to the butcher more than he ever cost in his prime, for the team.

The only objection urged against oxen is their slowness. But in most of the ordinary business of the farm, this can scarcely be an objection. In drawing into the barn hay and grain in the time of harvest; drawing manure from the yard on the farm; drawing wood to the door; ploughing and clearing the ditches for draining land; drawing rails for the repair of fences, &c. &c., oxen are conceded by all, to be the safest and best of teams. And even before the plough, the difference in the speed of the horse and the ox is not sufficient to make good the difference in the expense of keeping and attendance. A man with a pair of oxen may put in twenty or twenty-five acres of wheat in one season, while with a pair of horses he can but little exceed thirty acres.

I shall here add a comparative view of the expense of keeping a pair of horses and a pair of oxen for eight years. I shall suppose them both five years old, the first pair of oxen to be fattened and sold when nine years old, and their place supplied by another pair, five years old; and suppose them to be kept four years and then fattened and sold, together with the horses, which will then be thirteen years old.

A yoke of oxen 5 years old will cost	\$80 00
Interest 4 years	22 40
Keep 4 years	160 00
	262 40
Deduct oxen sold, (supposed fat)	100 00
	162 40
Another yoke 5 years old cost	80 00
Interest 5 years	22 40

Keep 4 years	160 00
	424 80
Deduct fat oxen sold	100 00
	324 80
A pair of horses 6 years old cost	\$160 00
Interest 8 years	76 80
Harness for 8 years	50 00
Shoeing for 8 years	50 00
Keep and attendance for 8 years	575 20
	912 00
Deduct horses sold, (13 years old)	100 00
	812 00
Total cost of 8 years work by horses	812 00
Total cost of 8 years work by oxen	324 80
Difference in favor of oxen	487 20

If the above estimate is correct, (and if it is not, I believe that a nearer approximation to the truth will be found to increase the balance in favor of oxen) it will be seen that two pair of oxen may be kept with less expense than one pair of horses.

FOREIGN ABSTRACT.

Paris dates to the 11th and London to the 10th July are received. The Journal du Havre of the 11th July has the following paragraph:

"We are assured that the despatches recently received from Washington, have transmitted to the French government the assurance that the explanations exacted by the chamber, would be furnished without difficulty by the American government. I ought to add that this news was hawked about by the friends of the ministry."

The British government has given notice that all pensioners who may enlist in the service of the queen of Spain, may continue to receive their pensions at home.

It is reported, though not believed, that the duke of Bordeaux is dead. Charles the X. and he at the last official advices were seriously ill.

The affairs of the Queen of Spain are getting better every hour. The troops of the parties to the treaty of alliance are pouring in to her relief and those of Carlos falling back.

Havre Market, July. 12.—Cotton—We have received 4744 bales—The sales of the week are 621 bales Louisiana, at 134 a 180f; 331 Georgia and Florida, at 125 a 155; 833 Mobile at 125 a 142; 133 Mobile at 126 a 142. The small holders continue to reduce prices for the sake of realizing, but the large holders are firm; the sales were chiefly for export and transit.

DOMESTIC SUMMARY.

Under this head we have barely room to say that from Thursday the 6th inst., until Monday the 10th, our city was convulsed with a mob, never large in active operatives, but viscious and desperate in resolution. On Saturday night the 8th, they forced open the dwelling of Mr. John Glenn, on Charles street, destroyed his furniture, books, wines, and liquors, and injured his superb dwelling materially, destroying the doors, windows and marble mantles. On Sunday the 9th, they held quiet possession of the property, commit-

ting whatever further injury they pleased. On Sunday night they forced the houses of J. B. Morris, Evan T. Ellicott, Reverdy Johnson and Jesse Hunt, Esquires, (the latter gentlemen being the then Mayor of the city) broke, burnt, and carried off all their furniture and books, and set fire to Mr. Morris's house, which was fortunately extinguished by the resolute firemen. The houses of Mr. Johnson, and Mr. Morris, are greatly injured. During Saturday night the fighting at times was severe, several persons were shot, some killed, and many wounded. The store of Capt. Joseph Willey, and the dwelling of Capt. Benzinger, were entered by the mob—they destroyed or carried off the greater portion of the contents of the first, and destroyed about two hundred dollars worth of the furniture of the latter. The offence of these gentlemen consisted in commanding bodies of mounted and armed citizens—in fine, of having discharged their duty as good citizens and brave soldiers, with a degree of resolution and chivalry that won for them the admiration of every one who had the courage to go near enough to witness their gallant bearing. As we presume an official statement will be published, we shall defer further remarks, preferring to give that to any thing we could say ourself, except to observe that the supremacy of the law should be preserved at every hazard. Order has been restored since Monday the 7th, 4 o'clock P. M., owing to the spartan chivalry of Gen. Samuel Smith.

The city of Washington, the capital of the nation has also been the theatre of a mob, as also Lynn, Massachusetts, both originating from the infamous proceedings of the abolitionists, whose acts seem calculated to generate a servile war.—The safety of the community demand that these mad fanatics be put down promptly, and we think every legislature in the country should pass conservative laws, rendering all participants in publications of the incendiary character lately disseminated, punishable for treason.

CLAIRMONT NURSERY.

On Sinclair & Moore's purchasing this paper of I. I. Hitchcock, I purchased his stock of *Breeding Swine*, *White Bremen Geese*, so famous for their size, and *White Turkeys*. Several pair of the two latter are now ready for sale, at \$5 a pair or \$2 50 each. I expect in a few days three sows of the *Barnitz breed*, one of the *large Bedford* and two of the *New York thin rind* to have pigs, and as soon as they are old enough to wean, say about six weeks, will be ready to fill the many orders sent to their former proprietor, as also those subsequently ordered of Sinclair & Moore. But, from the great length of time which has elapsed since the orders were given to I. I. Hitchcock, I feel a delicacy in filling them unless those orders should be renewed, and in order that no disappointment may ensue, I give this notice, so that gentlemen who sent their orders to I. I. Hitchcock, and may still be disposed to take the pigs, may have an opportunity of making known their intention to me. Regular entries of all such will

be made, and the orders filled in rotation as far as the stock of pigs will go, excepting those orders of Sinclair & Moore. Price \$10 to \$12 a pair, or \$5 to \$6 each, according to age.

In consequence of the death of the *Norfolk thin rind boar*, before the stock came into my possession, and being unable to procure another before the coming fall, I was under the necessity of putting the *two thin rind* sows to the Mackey boar, he being in my opinion the most suitable cross. For his character see the Farmer and Gardener, Vol 1, No. 15, p. 113, and No 25, p. 196, and for Norfolk thin rind, see No. 9, p. 65, Vol 1.

As I am acquainted with most of the principal breeders, of the improved short-horn *Durham*, and *Devon cattle*, in this part of the country, I would make purchases on commission, for our distant subscribers, customers and friends.

Persons having cattle of the above description for sale, with *certain, correct, and well established pedigrees* will please furnish me with a correct description of their stock and their lowest prices, delivered in Baltimore.

Those disposed to confide in my judgment to purchase, may rest assured that the utmost pains will be taken to give entire satisfaction; and I do apprehend that stock can be purchased here of equal quality and at a lower price, than they can be imported for.

Any information which may be desired, will be promptly and freely given relative to any of the above subjects.

All letters must be post paid.

ROBERT SINCLAIR.

N. B. In order to make one general answer to the numerous inquiries made of me concerning the *Morus Multicaulis*, I will remark, that I regret those trees are so scarce, as yet, in this country. I have only about 2,000 trees, which I still sell at the price of last year—75 cents per piece or \$5 per dozen.

CONTENTS OF THIS NUMBER.

Notice of an interesting correspondence on the condition of the Agriculture of the Eastern Shore—Do. of a prolific stalk of Timothy—A visit to Greenwood—The difficulties between Michigan and Ohio—How to take off grease spots—Interesting correspondence, illustrative of the use and value of lime, marl, clover, &c. in restoring worn-out soils—Notice of a proposition for geological and mineral surveys, &c; J. S. Skinner's letter thereon, together with one pointing out the advantages, &c.—Directions for sowing Mulberry seed and raising the plant—Mode of preserving horse radish—Rota Baga and turnip culture—An account of the cattle of Wales—Remedy for a cold and cough—Breeds of cattle in Maine, method of breaking oxen, &c.—Relative expense of labor of oxen and horses compared—Foreign abstract—Domestic Summary—Clairmont Nursery, its stock of animals, *Morus Multicaulis*, &c.—Prices Current, bank note table—Advertisements.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,.....	bushel.	2 50	
CATTLE, on the hoof,.....	100lbs	5 50	6 50
CORN, yellow,.....	bushel.	85	87
White,.....		85	87
COTTON, Virginia,.....	pound.	17½	18
North Carolina,.....	"		
Upland,.....	"	18½	19½
FEATHERS,.....	pound.	37	40
FLAXSEED,.....	bushel.	1 25	1 37½
FLOUR & MEAL—Best wh. wh't fam.	barrel.	7 50	8 00
Do. do. baker's,.....	"	7 00	7 50
Do. do. Superfine,.....	"	6 37	6 50
Super Howard street, dull	"	6 50	6 87
" wagon price,.....	"		6 62
City Mills, extra,.....	"		6 50
Do.	"	6 25	6 50
Susquehannah,.....	"		6 37
Rye,.....	"		5 00
Kiln-dried Meal, in hhds.	hhd.	20 00	
do. in bbls.	bbl.	4 37	4 50
GRASS SEEDS, red Clover,.....	bushel.	5 00	5 25
Timothy (herds of the north)	"	2 50	3 00
Orchard,.....	"	1 50	2 50
Tall meadow Oat,.....	"	2 00	2 50
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.	18 00	20 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	8
Hogs, on the hoof,.....	100lb.		7 00
Slaughtered,.....	"		
Hops—first sort,.....	pound.	12	
second,.....	"	10	
refuse,.....	"	8	
LIME,.....	bushel.	33	35
MUSTARD SEED, Domestic,.....	"	5 00	6 00
OATS,.....	"	35	38
PEAS, red eye,.....	bushel.		
Black eye,.....	"		1 25
Lady,.....	"		
PLASTER PARIS, in the stone,.....	ton.	scarce	3 25
Ground,.....	barrel.	1 37	
PALMA CHRISTA BEAN,.....	bushel.	2 00	
RAGS,.....	pound.	3	4
RYE,.....	bushel.	80	82
Susquehannah,.....	"	88	85
TOBACCO, crop, common,.....	100 lbs	4 00	5 00
" brown and red,.....	"	5 00	7 00
" fine red,.....	"	7 00	9 00
" wrappery, suitable	"		
for segars,.....	"	6 00	12 00
" yellow and red,.....	"	8 00	12 00
" yellow,.....	"	9 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"	4 00	5 00
" ground leaf,.....	"	5 00	9 00
Virginia,.....	"	5 00	10 00
Rappahannock,.....	"		
Kentucky,.....	"	6 00	9 00
WHEAT, white,.....	bushel.	1 25	1 30
Red,.....	"	1 17	1 22
WHISKEY, 1st pf. in bbls.....	gallon.	38	
" in hhds,.....	"	37	
" wagon price,.....	"	33	33½
WAGON FREIGHTS, to Pittsburgh,.....	100 lbs	1 50	
To Wheeling,.....	"	1 75	
WOOL, Prime & Saxon Fleeces,...	pound.	62 to 75	32 to 34
Full Merino,.....	"	52	62 30 32
Three fourths Merino,.....	"	47	52 28 30
One half do,.....	"	42	47 26 28
Common & one fourth Meri.	"	38	42 25 26
Pulled,.....	"	38	42 26 28

VALUABLE STOCK FOR SALE.

A FULL-BRED Durham short horn yearling BULL, a very superior animal; a 7-8 blood, same age; also two COWS, 4 years old, 3-4 blood, in calf by a full-bred Bull. Pedigrees given in full. Applications for any of the above cattle to be made to the Editor of the Farmer and Gardener, by whom the terms will be made known. Letters from a distance must be post paid. June 30th.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.		
BACON, hams, new, Balt. cured....	pound.	11	11½
Shoulders,.... do.....	"	10	10½
Middlings,.... do.....	"	10	10½
Assorted, country,.....	"	9	10
BUTTER, printed, in lbs. & half lbs.	"	18½	25
Roll,.....	"		
CIDER,.....	barrel.		
CALVES, three to six weeks old....	each.	3 00	6 00
Cows, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 87½	2 00
CHOP RYE,.....	"	1 75	1 87
EGGS,.....	dozen.		
FISH, Shad, No. 1, Susquehanna, barrel.		7 75	
No. 2,.....	"	6 75	
Herrings, salted, No. 1,.....	"	4 37½	4 50
Mackerel, No. 3,.....	"	4 50	4 62
Cod, salted,.....	cwt.	2 25	2 75
LARD,.....	pound.	10	10½

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,.....	par	VIRGINIA.
Branch at Baltimore,.....	do	Farmers Bank of Virginia,.....
Other Branches,.....	do	Bank of Virginia,.....
MARYLAND.		Branch at Fredericksburg do
Banks in Baltimore,.....	par	Petersburg,.....
Hagerstown,.....	3a	Norfolk,.....
Frederick,.....	do	Winchester,.....
Westminster,.....	do	Lynchburg,.....
Farmers' Bank of Mary'd, do		Danville,.....
Do. payable at Easton,.....	do	Bank of the Valley,.....
Salisbury,..... 5 per ct. dis.		Branch at Romney,.....
Cumberland,.....	3a	Do. Charlestown,.....
Millington,.....	do	Do. Leesburg,.....
DISTRICT.		Wheeling Banks,.....
Washington,.....		Ohio Banks, generally 3a3½
Georgetown,.....	Banks, ½.	New Jersey Banks gen. 1½a2
Alexandria,.....		New York City,..... 3a
PENNSYLVANIA.		New York State,..... 2½a3
Philadelphia,.....	3a	Massachusetts,..... 2a2½
Chambersburg,.....	3a	Connecticut,..... 2a2½
Gettysburg,.....	do	New Hampshire,..... 2a2½
Pittsburg,.....	1½a2	Maine,..... 2a2½
York,.....	1½a2	Rhode Island,..... 2a2½
Other Pennsylvania Bks. 1½a2		North Carolina,..... 3a4
Delaware [under \$5].....	3a4	South Carolina,..... 2½a3
Do. [over \$5].....	3a1	Georgia,..... 4½a5
Michigan Banks,.....	5a	New Orleans,..... do
Canadian do.....	5a	

DALE'S NEW HYBRID TURNIP.

THE subscriber now offers to the agriculturists a new and decidedly superior variety of Turnip, originated by R. Dale, Esq. an intelligent farmer, near Edinburgh, Scotland; it was obtained by unwearied attention in crossing the Swedish or Ruta Baga Turnip; it is superior in size and flavor to the Ruta Baga; is closer and finer in texture; it is as rapid in its growth as the white Flat Turnip. In fact, it includes the great desideratum in the selection of a proper variety of the Turnip which is to obtain the greatest possible weight at a given expense of manure. This Variety seems to be more adapted to this end than any other sort introduced; it will be found superior in quality to any of the White Field Turnips, and keeps longer than any of them, and very near as long as the Ruta Baga—the color is yellow—the shape oblong. Price 25 cents per ounce. The season for sowing is at hand. R. SINCLAIR, Jr. At Sinclair & Moore's Maryland Agricultural Repository. June. 30th.

WHITE ITALIAN MULBERRY SEED.

THE subscriber has just received and offers for sale at FIFTY CENTS per oz. a superior lot of White Italian Mulberry Seed, of the growth of the present year, (1835.) As this seed is fresh, and has been selected by a competent judge of the article, it can be recommended to such gentlemen as may desire to enter into the business

of the Mulberry and Silk culture, with confidence. And as the present is a proper season for sowing the seed, the opportunity of securing a supply should not be permitted to pass by unimproved.

R. SINCLAIR, Jr.

aug 18 at seed store connected with this office.

LARGE WHITE FLAT TURNIP SEED, &c. JUST RECEIVED,

550 LBS. large white flat and Red top TURNIP SEED, (growth 1835,) raised at the Clairmont Nurseries, by R. Sinclair, Senr. from the finest and best shaped roots. The perfect success of Turnip crops produced from this seed for the last 8 years, and the general satisfaction expressed by those who have tried them, added to the increased annual demand for the articles from Eastern Seedsmen and others, is sufficient proof of its superior quality.

It is recommended "to sow the seed of either kind the 10th a 25th August, on new cleared land, or well tilled clay or loam—quantity of seed required to crop one acre of ground ½ to 1½ lb.; if the latter quantity is sown it will be necessary to cross the plants with a harrow, after which follow with hoes, leaving the plants about 12 inches apart." For further information relative to preparations for seed, cultivation, &c. see R. Sinclair's remarks on Turnip crops in the American Farmer, vol. 8, page 128. Price \$1 per lb. and a liberal discount to those who purchase to sell again.

Also, early round Dutch Turnip Seed, Norfolk or large white, white Tankard, yellow Bullock, Ruta Baga, and Dale's new Hybrid Turnip Seeds, at 75 cents to \$2 per lb.

PICKLING CUCUMBER SEED of the best sorts, Endive, Brussels Sprouts; Lettuce of various sorts, among which are brown Dutch; large white Cabbage and Cilicia—the three most esteemed sorts, YELLOW TURNIP, RADISH, and BLUE CURLED GREENS, or DELAWARE DALE, a superior sort, of fall sowing—both of the latter articles were raised by Robert Sinclair, Senr., with his usual care, from plants selected expressly for the purpose.

R. SINCLAIR, Jr.

At Sinclair & Moore's Maryland Agricultural Repository, Light st. near Pratt street wharf. au 11

CABBAGE SEED, &c.

FOR SUMMER AND FALL SOWING.

JUST received, an additional lot of Early York Cabbage Seed of the Scotch short stalk variety, imported from Edinburgh. This cabbage is full as early as the English Early York, larger head, very dwarf, and is decidedly superior to all early cabbage seed for fall sowing. Also, Early dwarf Paris, Early Battersea, Early George, Flat Dutch, Savoy and other Cabbage Seeds. Large Holland Cauliflower and Kale Seed, of various sorts, among which is the Delaware Kale, the best sort for fall sowing, color dark green, tinged with purple, the leaf tender and curled.

IN STORE,

Corn Salad, Curled Endive, early Curled Cilicia, brown Dutch and large white head Cabbage Lettuce seeds; black and white Spanish and Yellow Turnip Radish seed for fall sowing, the latter a superior new sort, and will produce well if sown out at any season of the year.

Will be in store in a few days, the Pye Plant or Tart Rhubarb seed, producing a very choice vegetable, and should be cultivated in every garden.

R. SINCLAIR, Jr.

aug. 11 At seed store connected with this office.

STRAWBERRY PLANTS FOR SALE.

I HAVE a fine stock of good strong plants of the following kinds of Strawberries, which can be put up and packed carefully, so as to forward to order in safety, any reasonable distance from this Nursery.

ROBERT SINCLAIR.

August 17th, 1835.

LARGE EARLY SCARLET, per doz. 25 cts.; per hun., \$1 50.

Do. Pine Apple, for 500 and upwards, 20 per cent. discount from the above.

English Red Hautbois,
New Black Musk do.
Falkener's New Early Pine,
Large Scarlet Lima,
Downton's Scarlet Pine,
Wilmot's Superb,
French Alpine,
Red Monthly Alpine,
Red Monthly do. without runners, for 4 plants, 50 cts.

Per doz. 50 cts.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 17.

BALTIMORE, MD. AUGUST 25, 1835.

Vol. II

THIS publication is the *successor* of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, AUGUST 25, 1835.

THE MORUS ALBA OR WHITE ITALIAN MULBERRY—In order to make assurance doubly sure, we would recommend to persons who may have sown the seed of this tree, the present season, to cover their plant beds as soon as winter sets in, either with straw or long stable manure, to be confined by a slight covering of small brush wood, which should be permitted to remain on the beds until about the middle of April, when it should be gradually removed, so as not to expose the plants too suddenly to the changes of the weather at that unsettled season of the year. This precaution will not be necessary after the first winter.

We conclude to-day the *fifth* and *last* essay on Grasses by our much esteemed correspondent and friend, *Abednego Robinson*, Esq. of Portsmouth, New Hampshire. In thus bringing his valuable papers to a close, we would respectfully remind him that we should be happy to receive a few parcels of the seed and roots of the several grasses treated of by him, for gratuitous distribution among our southern friends. From the many conversations we had with him, and the warm attachment and feeling which he evinced towards his southern brethren, we feel assured that the opportunity which our proposition affords him, of benefiting the husbandry in that quarter, will meet with a cordial welcome from him.

GAMA GRASS.

Having frequent inquiries addressed to us concerning this *vegetable wonder*, and finding that the communications already published were not satisfactory, we addressed a letter to a distinguished gentleman and agriculturist, of Alabama, for information on the subject, and are now happy in being able to lay his valuable communication before the public. It will be perceived that our correspondent alludes to two other communications,

the one by himself, and the other by *Edward Delony*, Esq., of Talbotton, Geo. on the same subject. As it might not be within the power of some of our readers to refer to these papers, we have subjoined them, so that the whole matter may be before them at one view. It is not our purpose to dwell upon the advantages of this grass; for that duty is rendered superfluous by the luminous lights thrown upon its culture, produce and quality, by our enlightened correspondent, and his coadjutor, Mr. Delony.

Than our correspondent *Agricola*, few men have written more, or with happier effect, upon the various subjects connected with husbandry, and it is but sheer justice to say that there are few to whom the agricultural interests are so much indebted as to him. Practically engaged in the business, ardently devoted to the pursuit by interest and feeling, bringing to his aid a mind richly imbued with all the elements necessary to an accomplished farmer, and being full of enterprise, his experiments are happy illustrations, of the advantages to be derived from an intelligent and judicious combination of science with the physical department of husbandry.

It has sometimes appeared to us when looking at the *Scotch kale* while growing, that it might be made eminently conducive to the comfort of the milch cows on a farm, and contribute largely towards the yield of the milk and butter of the dairy. From its natural tendency to growing upwards, a very large amount might be grown on an acre of ground. Suppose we plant them a foot square apart, at that rate 43,560 might be raised on that quantity of land. If planted from the 15th of May to the 1st of June, in good rich soil, well manured, they would grow very large before winter, and afford a choice supply of succulent food, just at that period of the year when from the prevalence of the frosts, the pastures would have ceased to afford any. The expense of their culture should not be discussed when the immense benefits they are calculated to confer are considered. In a sandy loam, one ploughing and a harrowing would be sufficient to prepare the soil, and in clayey land an additional ploughing would be all that would be required; to this add two hoeings, and we have the whole extent of the cost of cultivation. Now we would ask, what is it com-

pared with the comforts to be secured to the cows, and the large increase thus accruing to the productions of the dairy. An acre of *Scotch kale* planted in the mode we have pointed out, to be fed out in the place of the *succulent food* of the pastures, would at 24 heads a day to each of 20 cows, sustain them for three months with the addition of the usual quantity of hay, straw, grain, &c., and we have no doubt it would add half a gallon of milk to the daily yield of each of the 20 cows, which would be equal to 10 gallons per day, or 900 gallons during the three months, and this, besides the satisfaction which the owner would derive from the reflection, that he had carried his animals through the winter in fine health and full keeping; that they had entered upon the spring of the new year in a condition which promised a liberal contribution to the milk pail, and that while the cows of such of his neighbors as were less provident, were suffering, his were revelling in the grateful luxury of well filled stomachs.

The *Italian Mulberry Seed* advertised by Mr. Robert Sinclair, jr. we can recommend as being *fresh*, having seen some of it tried and sprouted in about thirty-six hours; and we are happy to find that it is going off with a rapidity which gives the most flattering evidence that the culture is becoming of deep and profound interest to the agricultural community. The repeated inquiries from North and South Carolina, Virginia, Maryland, Georgia, Alabama, Tennessee and Kentucky, plainly demonstrate that a feeling is abroad which must soon make it a part of the system of husbandry of almost every intelligent and industrious planter and farmer.

The article on the subject of the first discovery of the use of *Gypsum* as a manure, by that excellent gentleman and intelligent farmer, Major *Adlum*, will be found to be full of interest, and we are happy to find that this veteran friend of agriculture, like the faithful sentinel, slumbers not on his post; but is ever on the alert to avail himself of circumstances as they may arise.

We are requested by R. Sinclair, of the *Clairmont Nursery*, to state that the sows advertised by him last week, as being in pig, have since then pigged, and that the pigs are large and thrifty, and will be ready for delivery in five weeks from this date.

We continue in the present number, from the *Transactions of Essex Agricultural Society*, directions for coloring or dyeing. The high reputation which many of the members of this association possess for scientific acquirement, imparts great interest to the article.

WORMS IN THE HEADS OF SHEEP.

The editor of the New England Farmer, recommends that the noses of sheep be kept smirched with tar during this and the ensuing month, in order to prevent the fly called by naturalists *æstrus ovis*, from depositing their eggs in the nostrils of the animal, which cause those worms in the head that so frequently destroy sheep. In order to do this he recommends that fine salt be deposited in some vessel mixed with tar placed where the sheep can have access to it, and they will smear their own noses in such a manner that the fly cannot assail them.

The editor of the Maine Farmer adds, that if a furrow or two be ploughed in the pasture when tar is not at hand, it will be found to be a preventive.

Both these modes are simple and easy, and certainly deserve fair trials.

GRASSES—ESSAY No. 5.

By Abednego Robinson, of Portsmouth, New Hampshire.

To the editor of the Farmer and Gardener.

In closing my series on the subject of Grasses, I feel that I cannot more profitably occupy my pen than in describing a newly discovered grass in our part of the country, which I fully believe may be translated to the South with decided advantage. It was first discovered on the estate of my neighbor and friend, *Joseph W. March, Esq.*,* a practical and scientific farmer—of whom I might say without flattery—that he is one of the most enterprising and intelligent agriculturists in our country. The extraordinary appearance of this grass, together with the equally extraordinary circumstance attending its growth, attracted the attention of this observant farmer, and he became so interested in it that he invited me to inspect it, with a view of obtaining my opinion of it. I know neither its *botanical* nor *common name*; but as a matter of justice to its enlightened discoverer, I propose to call it *Marchiana*.

In beholding it, circumstanced as it was, I confess I was struck with great astonishment. It was found in a small patch on a barren knoll, among a few large rocks, where it evidently had never been ploughed, and was surrounded with an old bound sward, not producing grass of any description, more than two inches high, and that of the most ordinary kind. This bunch or patch of grass, in October last, made a beautiful appearance, it was about six feet diameter, even sward, not in bunches or tufts. It stood perfectly erect, about four feet high, full of leaves, and although it was late in the fall, and it had experienced heavy frosts, it was still perfectly green. This grass, by careful examination, was found not to possess perfect seed at the time, and it was, therefore, thought proper to let it remain in order that

*Mr. March is the same patriotic gentleman who owned, some years since, the great *or Columbus*, which attracted so much attention throughout the country.

it might mature seed; but upon a subsequent examination, no seed could be found. Mean time, having experienced repeated heavy frosts, it became tinged a little with red; the grass was then gathered, dried, hulls rubbed off, a thorough search made again for seed, but could not discover any; but still hoped there were seed so small or hidden, that they were imperceptible, and by carefully saving the chaff and sowing it, it would be found to germinate; accordingly it was divided between Mr. March, and myself, and a part sown in the fall, and a part left to sow in the spring. This grass is of a small stalk, not as large as timothy, but much fuller of leaves; its head is branched into 3 or 4 parts, extending but little from the main stalk, and although found on so barren a spot, that no surrounding grass could possibly be cut with a scythe, I think from two to four tons could be produced from an acre of such unfavorable ground as described; and if its increase under high culture should be in proportion to that of other grasses compared with this, its product would be immense. By examination it was discovered that there were a number of small and apparently young, and very leafy bunches, which, to all appearance, had sprung from the supposed mother bunch: from these circumstances, I entertain a strong hope that it can be propagated from seed. If this by further experiment, should be reduced to a certainty, it can be cultivated to a greater profit than any grass yet within my knowledge.

It possesses the following properties. It can be cultivated to a very great advantage, on the poorest soils where no other grass known will grow at all, and afford a very heavy product. It will thus ensure a means of bringing any of the most worn down or barren soils to, and fit it for a crop. This is the least that can be said of it. But if it proves to be a good fodder, and also will produce good feeding pasture, and will thrive well in a southern latitude, from the circumstance that it is a very late grass, and also that it is known to grow very luxuriantly on the poorest soil, it will meet the wants of every agriculturist, the Virginian, Marylander, Carolinian, or other planters that may have reduced their plantations by continual cropping; and especially will it prove a blessing to those who may have left their homes, worn out by bad tillage, and sought newer and richer soil; for they may safely return to their old habitations and with but little attention to this most luxuriant grass have their old plantations as rich as they want them. If I succeed in the culture of this grass, I shall not fail to give information of it. This high encomium on it should not operate to reduce the value of the other grasses spoken of by me; for they are all worth the praise given them.

Before I conclude this essay, I will mention a fact which goes far to confirm the opinion which I formerly entertained with respect to the adaptation of the *Ribbon*, puzzle, or fancy grass, to the culture and climate of the south. A gentleman, a cotton planter from Alabama, of the very first respectability, who boards at the American Hotel, in this city, informs me that he is cultivating it in bogs on his estate at home, with entire success; that it produces three large crops in the season, and yields three tons at each cutting. He assures me also, that his neighbors are engaged in

the same culture, and are gratified beyond measure with its product, yielding as it does abundant crops of the best and most nutritive fodder: and this too, when they cannot find any other grass to grow at all in their section of the country.

ABEDNEGO ROBINSON, of
Portsmouth, N. H.

Peacock's Hotel, Baltimore.

[For the Farmer & Gardener.]

GAMA GRASS.

This grass should be planted on *light soil*, well manured, agreeably to the manner adopted by me for the purpose of ascertaining the mode of cultivation most favorable to a heavy product. I am assured in *this climate*, that, planted at *eighteen inches, from plant to plant*, and cut at *fifteen days growth*, beginning the *first day of May*, when it is found from 3 to 3½ feet high, and ending the last of October, it will be found to yield 300,000 lbs. of *green grass* per acre. If cut on the *first day of May*, and regularly on the first of every month till November, the product will be something less. For the manner of planting alluded to, see "Farmer & Gardener," of Jan. 6, 1835*—only instead of 2 feet, *from plant to plant*, I now find 18 inches, a better distance—the above product after the 3d year. The gama grass obtains its full growth, in about 30 days—when I cut for *hay*. Cut at 15 days it will be found *here* from 14 to 18 inches—but at this stage, I must contend, it is *one of the most delicate and tender grasses to be found*—capable of producing the finest *milk and butter*—at this stage, the apparent gratification with which the cow consumes it, cannot be exceeded. I would cut at this stage, only for a *milch cow, or fine calf*—for the *horse, mule, or ox*, at 30 days—at *either stage*, it is *without succulence*. It is called by the *Spanish people*, in South America, a *dry grass*, to designate its freedom from succulence.

At *each cutting*, I loosen the ground amongst the roots, if they have not locked and taken possession of the whole ground, with a harrow *hoe*. In this way, I keep the ground *clean* also—at eighteen inches the roots will take the whole ground in 4 years. I have been cultivating a plat of Gama 12 years, the *first roots* cultivated, east of the Mississippi—this plat is more *luxuriant*, and a more vigorous plant this year, than any year previous.

I know a plat of about *one acre*, in its native state, found at full maturity, by the individual who owns the land, 19 years ago. Discovering his animals extremely fond of it, he began, on the first discovery, to make *hay*, for winter provision, and has kept it for that purpose, (a natural meadow) ever since, and it has *improved*. Its *luxuriance* cannot be excelled.

The S. American Spaniards have a proverb, that the *age* of a *man*, a *mule*, and *gama grass*, is the same. There is a lot of *Gama grass* of very superior quality, on the *Pearl River*, known to be of *forty years* standing. After the roots lock, and take up the surface of the earth, they project, annually, *downwards*, to an *incredible* depth.

I sprinkle every spring, some *manure, cotton seed, rotten, or ashes*, over the surface after the

*We subjoin the communication for the convenience of the reader.

first cutting, (May the 1st). It is benefitted by manure, as much as other of the grasses—although in its native state, it exhibits, in some spots equal, if not greater luxuriance, than when cultivated. In the lands lately acquired from the Chocktaws, it abounds in rich limestone soil.

The Gama grass is cut by me, and stacked the same day, sprinkling salt with it, as stacked. One day's sun without salt is sufficient; it is the most readily cured of any grass I know of, for the reason already stated, viz., being remarkably without succulence.

I have tried every plan that have been suggested to cure this grass, finding it such an admirable resource for winter provision, and prefer to take what I cut before 12 o'clock, and stack in thin layers, alternately, with sweet, well saved rye, oats, wheat, rice, or barley straw—putting on each layer of grass, a sprinkling of salt, then straw—grass—salt, &c.

There is no necessity for separating the seed from its covering—put into sand, or dry earth, on being gathered and dried, it will, if planted early in the spring, say in the month of March, vegetate in a few days.

The best method of saving the seed, that I have found out is to go regularly into the lot of grass, as the seed is ripening, and by simply touching the ripe seed, at the end of the ear, they will fall into the hand; sometimes two will be found ready to fall off.

Your eighth query will be found fully answered in the Farmer of Jan. 6. 1835 No. 36, vol. 1., † as to soil—preparation for planting, &c.

To the 9th query, as to the method of cultivation, see the above—this method, from its result last year and the present, I must rest satisfied with.

It is one of the hardest plants, I believe on earth, the roots passing far below the possibility of frost, and fully preserved by the mean temperature of the earth. During the last 4 years this section of the union has been visited with the most fatal frosts to vegetation ever known by its oldest inhabitants—I cannot learn that this grass was ever hurt, in a single instance—I have been particular in my observation on that point. As regards the impoverishing or improving quality of it, I am decidedly of the opinion of Mr. Phillips of Georgia, as mentioned in a communication of Mr. Delony, in the Farmer, No. 45, Feb. 24, 1835.† I beg leave to point Mr. Robinson to this communication.

The Gama is singularly calculated for soiling—it being cut with so much ease by the sickle or scythe—the time it requires to mature, &c. all suggest this. At one month's growth, I can cut in two minutes, more than an animal can eat in a day.

Where the accumulation of manure is a part of the agricultural system, I know nothing that comes in more happily for the use of the Farmer. With a judiciously constructed dung-stead or place for accumulating manure, and moveable racks, it is incredible with what ease and expedition a large stock could be fed with this grass. I find no difficulty in cutting it with the scythe.—For its claim as to being nutritive, I refer to Mr. Phillips' opinion before mentioned—which, how-

† Subjoined.

† Subjoined.

ever, in the province of S. America, is proverbial. The loss in weight when cured into hay, depends much on the mode adopted—I have cured it with the loss of less than one half. I have found that ashes and rotten cotton seed, stacked, and well mixed, or rather the cotton seed stacked in a pen, fresh from the gin, with the ashes leached, the cotton seed to be wet as each layer is laid on, about 6 inches, with 2 of ashes, and continued until the pile is completed, and laying at rest for about one month, has a singular effect in producing a vigorous growth of the Gama, when used as a top dressing in the spring—also ashes and Plaster of Paris.

AGRICOLA.

[For the Farmer & Gardener.]

GAMA-GRASS—MODE OF CULTIVATION.

Among a number of experiments made, and making, by myself, and through the aid of kind friends, disposed to second my intentions, for the purpose of ascertaining the mode of cultivating the GAMA-GRASS, best calculated to bring that plant to the highest perfection, I have now sufficiently ascertained the result of the following, to feel justified in giving it to those who are cultivating that grass.

In the spring of 1830, I planted out a seed bed, drilling in rows 18 inches wide, 12 from plant to plant—they came up and grew off well. Early the following spring, I took up the plants, divided them, and set out, preparing the ground previously as follows:—The soil a grey sandy land, on a red, loamy loose clay—The top soil six to nine inches, dark grey, and sometimes inclining to black—The land had been two years in corn and peas, and was well set with crab grass—had made only three crops—The last year the pea vines, and grass, were permitted to rest entirely on the soil—About the first of October, the land got a good dressing of compost manure, stable dung, and cow pen with swamp mud. The cattle had been well littered with oak-leaves, and rye-straw, and the manure was literally long manure, in making which, not a particle of the liquor, or urine, was suffered to be lost. This manuring was ploughed under in imitation of trench ploughing—one plough (bar shear,) following another of the same but smaller—which effectually turned grass and pea vines under at least fifteen inches—on the top, rye was harrowed in, going with the furrow—previous to sowing the rye, the land was dressed with rotten limestone, a species that abounds in this section of country, and which had become pulverized by the preceding winter's frost and rain.

The rye came up, and grew off well—uncommonly rank, and furnished a fine mass of food for calves and hogs, until the last of February, when all were taken off. By the first of April it was rank again. On the 2d. another top dressing of the compost, but in a state of more perfect decay, was applied, and well turned under with a small Freeborn plough—harrowed with the furrow—The ground was now carefully laid off in drills, at two feet, and the plants placed in them, at the same distance.

During the year it grew well—the following year it “shot ahead,” and this season it is “out of sight,” of any I have been able to raise, or have seen raised by the many gentlemen to whom I distributed seed. Every cutting since the first of

May, (and that one averaged three feet,) has exceeded forty-five inches in length. It was prevented from seeding, for the purpose of ascertaining the production. After the cutting in May, rotten cotton seed was strewed over the ground—and which was worked in amongst the roots, when the ground received a loosening, amongst the plants, after that first cutting. The season has been highly favorable. The cutting took place on the first day of each month, commencing with May—and five cuttings have been made—the grass fed away green to working oxen, horses, and mules—cut up in a patent cutting box, and mixed with about one fourth of oats straw, (not thrashed) a sprinkling of meal was added, say one pint tin cup full to each animal twice per day. At each cutting, a number of the smallest bunches were weighed, and also of the largest—None found less than five pounds, and many fifteen, and some sixteen and seventeen—A fair average, I am satisfied, would be, eight pounds per plant, at each cutting—and seven cuttings in the season—In the mode of planting to which the extraordinary luxuriance was owing, I was governed by a knowledge of the singular depth to which this plant extends its roots into the earth.

Believing that a deep soil by nature, or made so by art, was alone calculated to show the best production of this plant, I have been anxious to see the result, under favorable seasons, and confess myself now satisfied.

From each cutting, I made a small stack of hay, cutting after the dew was off, and mixing, alternate thin layers of grass, and oats straw, with a sprinkling of ground alum salt, on each layer of grass. It cured well.

A few handfuls of each cutting were cured alone, in the sun—that cut in May, gave fourteen pounds of grass—six pounds of hay—each cutting gaining in result.

AGRICOLA.

Alabama, Oct. 4th, 1834.

GAMA GRASS.

A writer in the “Columbus (Ga.) Sentinel,” gives the following account of this valuable grass:

“In some of the last numbers of your valuable paper, an inquiry was made as to the success of the culture of the Gama Grass—and a request that those who had tried it would give the result of their experience, and their opinions. So far as my own extends, I can say but little, not having given it a fair trial—being deficient both in quantity and time. I procured last winter a few seed from Dr. Bartlett, the former able conductor of the “S. Planter,” and planted them in a rich bottom soil: only about half a dozen seed came up, owing I presume to my planting them too deep, together with the wet spring, which caused them to rot, and many of the seed being, no doubt, without substance in them, as I have since learned that only those seed which are dark colored will come up, the light or straw colored being entirely without germinating substance. Those which did come up, grew off well and flourished finely—some of the bunches having from seventy to a hundred branches growing up as tall as my knee. I did not cut it and the cold winter has only killed the blades a little more than half way—there were no stalks, as it does not seed the first year—the blade is from half an inch to three quarters wide.

As I can say but little with regard to my own experience in the cultivation of this important grass, I have it in my power, and authority to communicate the experience and opinions of a gentleman who has made a very fair trial with the article, and he gives it all the praise which has heretofore been bestowed on it.

On my return home from Morgan county, in December last, I called at Mr. Elijah Phillips' of Monroe county, whose standing is well known to the community around him and no doubt to yourselves, as a most excellent and experienced farmer. On the farm of this gentleman I found an abundance of the Gama Grass in cultivation.—By request Mr. Phillips readily gave me his opinion of it, which I noted down at the time. He does not hesitate in saying it is a most superior article, and decidedly preferable to any other grass which he has ever seen, remarkably productive and very nutritious; his horses and cattle are extremely fond of it; indeed, preferring it to fodder, which contains much less nourishment than the grass; it cures readily and retains a sweet odour. It will grow in any soil wet or dry, but the most luxuriant which he had in cultivation this year, is about an acre on the bluff of the river—it flourishes extremely well on hills and marshy grounds, particularly in what is called Crawfish low grounds, drained well.

He prefers planting it in hills of the distance of two feet each way—the hill to be made large, broad and light, after which it requires but little or no cultivation; one or two handfuls of cotton seed deposited in the hill and mixed with the soil, he found to produce a fine effect. A branch of the grass should be set in the centre of the hill, or one or two good seed, and those only of a dark color are good and sound—when the plant comes up (which you will know from its resemblance to young wheat, just out of the ground,) you have little more to do—keep the grass and weeds from growing too large around it, and give it one or two light ploughings during the year.

He has never seen any article of cultivation improve the land on which it is growing, faster than the Gama Grass, although it has a most powerful root, but the bunches are in proportion to the roots, branching numerously and spreading wide. Mr. Phillips, is of opinion it can be cut monthly as long as the season would allow—he made three cuttings the last summer, and he does not think the branches lost a *half pound* each, the second cutting; and he was certain there was not *two pounds* difference in the branches between the first and third cutting. He weighed several bunches which averaged from twenty to thirty seven pounds each; and he has no doubt there were several of the largest bunches he let stand for seed, which would weigh *thirty pounds* each; in fact he had never seen such production in his life. But let us make the calculation even at fifteen pounds to the bundle or hill, and allow a loss of half for curing, which will leave seven pounds of cured hay—allowing then fifteen hundred hills to the acre, (which is not enough by fifty five hills,) and you will procure *ten thousand five hundred pounds* of good hay from *one acre* at one cutting, and if you make three cuttings and allow fifteen hundred pounds for losing, you have the net amount of *thirty thousand pounds* of good hay, from *one acre* of ground, in *one year*—gray land

will always suit it best, and I believe it will make but little difference whether it be planted on hill sides, level, or low grounds, so that it is not red and stiff or too wet: and if the land is poor, it will soon make it rich.

Mr. Phillips has four other kinds of grass besides the Gama: the Feather Top or Velvet Grass, the Crow Foot, which he considers a superior grazing grass, the Red Top, which he values next to the Gama for hay, and the Blue Grass.—He was kind enough to give me a half pint of the Gama Grass seed, a few of which, I will give to any gentleman who wishes to make a trial of it.

Respectfully, yours, &c.

EDWARD DELONY.

Talbotton, Ga. Jan. 15th, 1835.

[From the Metropolitan.]

FIRST DISCOVERY OF THE USE OF PLASTER OF PARIS.

"Honor him, to whom honor is due."

MESSRS. EDITORS:—I observe in the *Genesee Farmer*, Vol. 5, No. 22, an article headed, "Interesting to Farmers," purporting to be the history of "The first discovery of the utility of Gypsum, or Plaster of Paris, for agricultural purposes;" which states that it was made by a day labourer, engaged in pounding plaster near *Hilburn* in *Germany*, &c.

I am of opinion that a person who makes a discovery highly useful, to his, and other countries, in temperate latitudes, ought to have the full credit of it, and to have his name handed down to posterity, as a benefactor of mankind—for I believe where plaster suits the soil it is applied to, that in a few years it will enable the farmer to double his crops.

In Arthur Young's *Annals of Agriculture*, published in the year 1795, vol. 23, page 146, speaking of Gypsum, he says, "This manure was discovered by Mr. Mayer, a German Clergyman of uncommon merit, in the year 1768; it has since been applied with signal success in *Germany, Switzerland, France, and America*, &c."

In the 1st volume of the *Memoirs of the Philadelphia society*, for promoting of Agriculture, page 158, there is a communication from the late Judge Peters, who was then the President of the society, of which the following is an extract—"The first time I saw the Agricultural effects of Gypsum was several years before the commencement of our Revolutionary war, on a city lot belonging to or occupied by Mr. Jacob Barge, on the commons of *Philadelphia*. He was the first person who applied the Gypsum in *America* to Agricultural purposes: but on a small scale, &c." Again in page 159, speaking of Mr. Barge, he says—"He shewed me a letter in *German*, from one who had gone over from *Pennsylvania* to *Germany*, for redemptioners, as was the custom of that day, &c."—and again page 160, "The person who wrote from *Germany* to Mr. Barge, informed him (with what correctness I know not) that the discovery was then of no long standing in *Germany*, and had been accidentally made by a labourer employed in mixing *Stocco mortar* at a large building; he saw that the path used or made by him, in going from his work, to his Cottage, threw up a luxuriant crop of clover, (in the

succeeding season when all other parts of the field exhibited sterility, &c." The person who wrote from *Germany* to Mr. Barge, was Mr. Michael Immel, jr. who then kept a hardware store in *Philadelphia* entirely of *German* manufacture.

There were several counties of *Pennsylvania* principally settled by *Germans*, and I remember when they thought that tools of mechanics and others could not be good, unless they were brought from *Germany*, or were made by *Germans* in this country. Mr. Immel, was in the habit of going about once a year to *Germany* to lay in his stock of hardware; and was at the same time the cause of numerous families emigrating to this country, some as redemptioners, and others as men of property on their own account. Mr. Barge gave Governor Mifflin of *Pennsylvania*, (I being present) after replying to several questions the Governor put to him concerning dairies, &c.—the following account of the first discovery of the plaster being useful as manure. The labourer who was the cause of the discovery, when he was returning from his work (in plaster) to his meals, was in the habit of flinging an apron which he wore, with one of his hands, and any of the dust of the plaster that might be on it fell to the ground along a path that he travelled over, which passed near the dwelling of *Carlson Mayer*, and who observed that the grass, clover, &c. grew much more luxuriant on one side of the path, than it did on the other, which led him to examine into the cause of it; and which produced the first experiments on it as a manure, and Mr. Mayer being a liberal minded man, communicated them to the public, and the use of it has since been of such immense value and advantage to this and other countries.

This information to Governor Mifflin must have been more than twenty years after Mr. Barge shewed the letter written in *German* to Judge Peters, and consequently more fully—as by that time numbers of unprejudiced farmers in the neighbourhood of *Philadelphia*, and the adjoining counties were using it liberally. The first time I recollect to have heard of it was in the year 1781, when the members of the State Legislature and a few others brought home with them from *Philadelphia* from two quarts to a gallon to experiment on, and most of the trials that year, was made upon indian corn, and in the following Autumn, the wonderful effects of it was blazoned to the public, no doubt with some exaggeration. This I suppose and believe, was the first that was carried to the west side of the *Susquehanna river*; but it was slow in making its way into the country, or of being much used by the generality of farmers, and many idle tales were in circulation about it; that which had the greatest effect in preventing its use was, that the land would be so sterile after using it for three or four years, it would be rendered useless and ruined forever afterwards; so that it was an uphill work to bring it into general use, until the late Judge Peters by putting questions to some of the best, intelligent and enlightened farmers in *Pennsylvania*, which he published to the world, with the answers he received from them, in the year 1796—which operated like a charm, and introduced the use of it very generally among the farmers of *Pennsylvania*, and I believe in other States.

I have written the above to give the credit (as far as I have any knowledge on the subject) to those to whom it is due. First to *Parson Mayer*, (or according to *Mr. Barge's* pronunciation, I would have spelt his name *Mayers*, though both names *Mayer* and *Mayers* are common among the Germans) who was the first discoverer of its usefulness as a manure, *Mr. Immel* was no doubt the cause of *Mr. Barges* importing it, or possibly he brought it to this country for him. But the late *Judge Peters*, was the cause and deserves the merit of introducing it into general notice and use in this country, by his valuable publications on the subject, and *Mr. Immel* by writing to *Mr. Barge* was the first cause, (perhaps incidentally) of its being used as a manure in this country.

As *Mr. Immel* was also a man of merit, I will here take a brief notice of him.

His father, *Michael Immel, Sen.* lived on the banks of *Codorus creek*, about a mile from *York Town*, in *Pennsylvania*; he had two sons, and three daughters, of which *Michael Immel, Jr.* was the eldest. It was the custom in those times, with some exceptions, where there were several sons, to bind out the elder ones when they became sixteen or seventeen years of age, to learn a trade, and when their time of service expired, the father generally gave them a sum of money to begin the world with, and as they married early,* and were industrious, they soon got forward in their business, and accumulated property, and the farm, or homestead was mostly given to the youngest son, who, with few exceptions, staid with their parents in their old age; the daughters when they married had generally something given to them, and if unmarried they were not forgotten in their father's will.

Mr. M. Immel, Jr. when his brother *John* became of sufficient age to manage the farm, his father proposed to him to give him a sum of money to begin business with, which was complied with, and if my recollection is correct, I heard the old gentleman tell my father that he gave him two hundred pounds, (a large sum in those days, or at least was considered as such) with which he set out for *Germany*; whether he took with him the cash, or took something in lieu of it to trade with, I do not know. When he arrived in *Germany*, he made a tour into the interior and other parts of it—and as that country is full of villages, in his passing through them, the inhabitants were very inquisitive, respecting the new world as they called our country, and he to draw their attention, got a broad pink coloured ribbon, on which he painted in *German text*,—“*Der nie laender*,”† which literally construed is the new land man, but more emphatically it was understood, as the man from the *New World* or country—which brought great numbers of the inhabitants about him to inquire what sort of a country this was—when he informed them it was one of the best in the world, and the mildest government, that the taxes were a mere trifle, scarcely worth notice, and as there was no

* They have an adage, that a wife is half the bread of the family, which induces them to marry early.

† Which ribbon he put round the crown of his hat, and let it hang to his waist down his back.

Princes or other great men to order them to leave their own business and attend on them, they were always masters of their time and business, that we had all the domestic animals they had in *Germany*, and that our hogs eat the acorns off the trees, and the turkies done the same off the chesnut trees—and his other recommendations of the country caused considerable numbers to emigrate to it. Some of them men of property, and others as redemptioners.

There was then a large tract of land called *barrens* that commenced between two and three miles from *York Town*, and continued Southerly into *Maryland*, and upwards of one hundred thousand acres of it was in *York Town, Penn.*, without any trees or timbers on except along the streams, all the remainder of it, which was somewhat hilly, was covered with the dwarf oak, then called ground oaks—and chinquapins, or dwarf chesnuts, so that what *Mr. Immel* told them was literally true, as to the hogs and turkies.

This tract was wholly settled by Germans, mostly people of some property, who brought horses, cattle, &c., and got titles for their land, and being very industrious, they soon made considerable improvements, in clearing the land and cultivating it. As every little rill was carried along the sides of the hills, they had beautiful meadows; and I can recollect to have seen those farmers bring the various things they had to dispose of to *York Town*, for sale, viz., wheat, rye, buckwheat, also hemp and flax, with some pork in the season; the beeves were mostly sold to butchers. The women brought in butter, eggs, poultry, and cheese, with sundry other articles. The wool was manufactured by the family into linsey woolsey for their own use; they also made hemp, flaxen and tow linen, and if after the family was supplied, there was any to spare, it was sold, so that they had nearly all the necessaries, and many of the comforts of life within themselves. They had also fine apple, and peach orchards, and as the trees were planted on both sides of the hills, on the north and south sides, they had always good crops of fruit, for if one side of the hill failed, they had fruit on the opposite side; but generally, except in chance years, they had plentiful crops on both sides. As this tract of country had rather a forbidding appearance, if it had not been for *Mr. Immel*, the greatest part of it might have lain idle for years; but the idea of having land of their own, which they could get from the proprietors (the *Penns.*) for five pounds for one hundred acres, \$13,33, and one half penny per annum, called a quit rent, they set down on it with alacrity and improved it—and the grand sons, and great grandsons of these people are now scattered over most of the states, North, South, and West of *Pennsylvania*—many of them well educated, and are now officiating as *Parsons, Doctors, Lawyers, Storekeepers, and Farmers*—also members of the *Legislatures* of the states they reside in, and I have known some of them members of *Congress*. So that I think that *Mr. Immel* may be ranked among the useful, if not the great men of our country, and deserves well of it.

JOHN ADLUM.

Add not trouble to the grief worn heart.

SHEEP.

It is a well known fact, that wool growers in this section of the country, whose flocks exceed 200 sheep, lose a large number of their sheep each winter. Some of them, we will allow, die of old age; but too many of them do not live more than two years. There is a remedy for this loss of property, and that too directly in the hands of the shepherd. This being the case, I am anxious to lay it before the public that all may profit by it hereafter.

It is a custom among many farmers, when they drive in their flocks in the fall, to put the whole flock together in a single barn, shed, or whatever place they may happen to have to keep them in. Now it is very evident that the young, the very old, and weakly, or in other words, the most unhealthy of the flock, cannot possibly fare equally well with the rugged, and it is a fact while the one is thriving the other is losing its strength. When kept in this situation one after another falls from hunger, and other causes incident to this state of affairs, and they are no longer able to raise themselves. Here the shepherd for the first time separates the almost lifeless sheep from the multitude, and endeavors to restore it to health. But it is too late. He is soon convinced that “a stitch in time saves nine;” that ten thousand dying sheep, are worth no more than the wool on their backs.

When sheep are brought in from the pastures in the fall they should be divided into four distinct flocks, viz.

1st. Meagre or sickly—which should be kept in a warm barn, with but few in a pen. They should have salt as often as once a week—should have a handful of corn each day through the winter—as much hay as they can eat through the day, and should be watered as often as twice a day. This will not fail to keep them in good order.

2d. The Ewes also should be kept from the rest of the flock and should receive the same treatment with the exception of the grain, which may be given occasionally, though it is not necessary.

3d. The Bucks, intended for the benefit of the flock, should be kept by themselves, that they may be in good order, and for another reason that will suggest itself to all wool growers.

4th. And last of all are the Wethers, which may be, if healthy, kept entirely on hay and water.

I have for twelve years kept a large flock of sheep, and have lost a great many; but since 1830 I have adopted this course and have not lost one tenth as many as I did in same number of years preceding that time.

AN OLD FARMER.

[*Claremont, N. H. Eagle.*]

The *Primitive Earths*—are sour, viz: clay, sand, lime, and magnesia. These are the only earths which enter into the composition of soils; they also enter in very minute portions into the organization of plants. Sand and clay are by far the most abundant; lime is required but in small proportions: every soil, however, is defective without it. Magnesia is found but in few soils; its place is well supplied by lime; its entire absence, therefore, is not considered any defect.

MARYLAND HORTICULTURAL SOCIETY.

SATURDAY, August 1, 1835.

The following articles were exhibited, viz:

By Mr. Thomas Dixon, one dozen Tomatoes, three of which on one stem weighed 3 lbs. 10 oz.

By Mr. J. Maccauley, gardener to James Wilson, esq. at Huntingdon, York road, four Egg plants, two of which were the early Smooth Stem variety, and the other two the Prickly Purple, measuring $17\frac{1}{2}$ inches in circumference.

By Mrs. Doct. S. Birkhead, one dozen fine yellow Plums, and two fine large Prune Plums.

By Mr. Thomas Dixon, some excellent Pears.

By Robert Gilmor, Sen. Esq. two very superior Figs, measuring $7\frac{1}{2}$ inches circumference, and weighing $4\frac{1}{2}$ and 4 ounces. They were very rich and almost entirely free from seeds.

By Mrs. Geo. W. Riggs, one dozen very fine Moulehouche Pears.

By Robert Sinclair, Sen. the following Dahlias, viz: *Purpurea Variegata*, *Inwood's Crimson Multiflora*, *Pluto*, *Young's Magnificent*, and *Foster's Incomparable*.

By Mrs. Geo. W. Riggs, a fine specimen of double white Pomegranate.

At 12 o'clock the Committee awarded the weekly premium to Mr. J. Maccauley, gardener to James Wilson, Esq. for his very superior Egg Plants.

SATURDAY, August 15, 1835.

The following articles were exhibited, viz:

By Mr. Wm. Shellman, of Washington county, Md., a Radish weighing 9 lbs. and measuring 26 inches in circumference.

By Mr. Jacob H. Grove, of Sharpsburg, Md. a fine sample of his crop of Wheat, indicating an abundant crop.

By Mr. Wm. F. Worthington, specimens of very fine Pears. Mr. Worthington received the tree from the Eastern Shore of Maryland, and was informed that it was originally obtained from New Jersey, under the name of the *WASHINGTON PEAR*. It is, however, entirely a different fruit from that usually known as the "*Washington*," and the latter is, besides, a *late* Pear. The flavor of Mr. Worthington's *Washington* Pear, is very rich, sweet, and very highly aromatic; it is very "melting," exceedingly delicate in texture, perfectly free from all granular formations, and a very thin skin. It is of a yellowish green color with slight blush on the sunny side, and two inches in diameter; the upper part elongated, terminating in a blunt point, with the stem on one side of the point. It was before unknown to those of the Society present, and is deemed a valuable acquisition. Mr. Worthington politely offers buds now, or grafts, at the proper season, to those who desire to cultivate them.

By Mr. Geo. Carey, three *Magnum Bonum* Plums, measuring $6\frac{5}{8}$ inches in circumference, and weighing 10 ounces.

By Mrs. George T. Dunbar, fine specimens of the *Magnum Bonum* Plum, and some fine Pears.

By Mr. George Decker, specimens of the green and yellow *Gage* Plums, and a bunch of white sweet water Grapes.

By Mrs. B. I. Cohen, specimens of French Plums, names not known--of very superior quality.

By Mr. Peter Combs, very fine specimens of golden *Beurre Pear*.

By General T. M. Forman, of Cecil county, Md., a specimen of the *Forman Cherry*. This is an extraordinary production, and well worthy the attention of the public. It is the only cherry known in this latitude that ripens its fruit so late in the summer, and on that account is a great novelty. It is, besides, of excellent flavor, and though of rather small size, its seeds are also very small. The tree was found wild in a fence corner on Gen. F's estate; its growth is very erect, resembling in form the *Lombardy Poplar*. Gen. F. has gathered fruit from it as late as the 7th of September.

By Mr. Henry Moore, of Aisquith street, 13 of his fine *MOORE PEARS*, the whole weighing 7 lbs. 4 oz. These were very superior fruit, and the variety is well worthy of general cultivation.

By Mr. Zebulon Waters, a very fine specimen of the *Amaryllis Belladonna*, in bloom, and a fine plant of the *Glaxinea Speciosa*.

By Henry Moore, of Aisquith street, a specimen of his beautiful seedling *Althea*, and of a large double *Helianthus*. The *Althea* is of a most beautiful delicate blush, outer petals blotched with deep carmine, and very double.

At 12 o'clock the committee awarded the weekly premium to Mr. Wm. F. Worthington, for his excellent *Washington Pears*.

GIDEON B. SMITH, Cor. Sec'y.

ON COLORING OR DYEING.

[From Transactions of the Essex Agricultural Society.]

(Continued.)

Yellow.—There are a great number of imported and native plants, roots and barks, that, by the aid of the mordants alum and tin, dye yellow. But the very best of all these, viz. the yellow oak bark, or quercitron bark, as it has been named in England, being very plenty in this country, it seems altogether unnecessary even to mention any other.

To dye 10 lbs. weight of cloth, or woollen stuffs, of the highest and most beautiful orange yellow, 1 lb. of quercitron bark, and the same weight of murio-sulphate of tin, will be required*; the bark, powdered, and tied up in a bag of thin cotton or linen cloth, may be first put into the dyeing vessel, which of course must be brass, copper, glass or earthen, with hot water, for the space of six or eight minutes; then the murio-sulphate of tin may be added, and the mixture well stirred two or three minutes. The cloth, previously wet thoroughly with warm water, may be put in and

*Murio-sulphate of tin. This preparation differs somewhat from the muriate of tin, or nitromuriate of tin, the method of preparing which is given in a preceding part of this essay. It is prepared as follows: Take six ounces of muriate acid, and pour it upon about the same weight of tin, granulated as above directed, in a glass vessel. Then pour slowly upon the same four ounces of sulphuric acid, and let it stand in a warm place till the acids saturate themselves with tin, that is, till they dissolve no more, which will be soon effected, if that be applied, and gradually without being heated.

turned briskly a few minutes; the color applies itself in this way so equally to the cloth, and so quickly, that after the liquor begins to boil, the highest yellow may be produced in less than fifteen minutes, without any danger of its proving uneven.†

When a bright golden yellow, approaching less to the orange, is wanted, four ounces of the murio-sulphate of tin, and two ounces of alum, and one pound of bark, managed in the same manner as above directed. Pure bright yellow, of less body, may be colored by employing smaller portions of the articles above mentioned.

A good yellow may also be produced by boiling the cloth for one hour in one seventh of its weight of alum dissolved in a suitable quantity of water, and then, without being rinsed, put into a dyeing vessel with clean hot water, and about as much quercitron bark, tied up in a bag, as was used of alum. Boil and turn it as usual, until it takes sufficient color, then dip it in warm lime water for ten minutes, and rinse it well immediately afterwards. Tin, however dissolved, when used in coloring wool or silk, renders the fibres a little harsh; but this may be in a great measure obviated by employing the murio-sulphate of tin with a mixture of alum, or alum and tartar, and combining these with the coloring particles of the bark before they are applied to the stuffs.

In dyeing silks, more alum and less tin should be used than is directed for woollens, because tin, unless used sparingly, always diminishes the glossiness of the silk.

To produce a lively yellow on silks, it will be sufficient to boil after the rate of four ounces of bark, three ounces of alum, and two ounces of the murio-sulphate of tin, with a suitable quantity of water, for ten or fifteen minutes, and the heat of the liquor being reduced so that the hand can bear it, the silk is to be put in and dyed, as usual, taking care to agitate the liquor continually, that the coloring matter may not subside until it has acquired the proper shade. By adding very small proportions of *cochineal* to the bark, the color may be raised to a beautiful orange, or even aurora. A similar effect, though less brilliant and beautiful, is produced by adding madder to the quercitron.

A Yellow on Cotton and Linen.—It has been said that the fibres of cotton and linen have not so strong an affinity for clay and tin as those of wool and silk. A somewhat different management, therefore, becomes necessary in coloring the former goods, from that which is required for the latter. The fibres of linen or cotton are prepared for dyeing by being first boiled in water, with a portion of potash, and afterwards bleached. It should then be soaked in water soured with sulphuric acid, to dissolve and remove all earthy matter, and then be thoroughly rinsed, to free it from the acid. Alum, and not tin, must be used as the mordant, for although tin gives yellow exceeding all others in lustre and beauty, on cotton,

†Should a deeper orange tint be desired, add to the quercitron bark a little madder, perhaps an ounce or less to the pound of bark, according to the color desired. This will greatly increase the beauty of the color, when examined by candle light.

they decay very speedily when exposed to the sun and air.

For 1 lb. of cotton and linen yarn, or cloth, take alum 3 ounces, sugar of lead 1 ounce—dissolve them in one gallon of water, about blood warm, and soak the stuff two hours; take it out, moderately squeeze or wring it, let it then be dried, and then soaked again in the solution of alum, squeezed and dried as before; then let it be thoroughly washed in lime water and dried as before. Let it then be well rinsed and put into a kettle of cold water with three ounces of quercitron bark tied up in a bag; stirring it frequently, gradually raise the water to a boiling heat; let it boil a few minutes only, as longer boiling would injure the color, and take out, rinse and dry as usual. It has been found that by immersing cotton a great number of times, alternately in the solution of alum and lime water, and drying after each immersion, the color acquires greater body and durability. The reason of this seems to be found in the shrinking aluminous basis (the clay) in drying, and thereby making room for an additional quantity to penetrate the fibre after each drying; and the larger the quantity of this substance united or incorporated with the cotton, the deeper and more durable will be the color fixed upon it.

There are other methods of preparing cotton, so that it will take a sufficient quantity of the clay, from alum, without the use of the sugar of lead, and which are, consequently, somewhat cheaper than the one described above.

Take of the roots of our common sumach, (*rhus glabrum*), dried and chipped, one pound, sal soda four ounces, or barilla half a pound, which is an impure soda used by manufacturers of hard soap, and in two or three gallons of soft water boil them for one hour, and then strain off the liquor and steep the cotton therein for two or three hours. Take it out of this liquor, and steep it for the same length of time in a mixture of warm water and fresh cow dung; rinse it out and dry it. Dissolve three ounces of alum in one gallon of water, soak the cotton in this and lime water alternately, and dye it slowly with the quercitron bark as before directed. By the addition of madder, the yellow may be raised to orange, &c.

Woollen silk, or cotton goods, colored yellow as directed, may be immersed in the saxon blue dye, (second method,) and made to take any shade of green which may be desired.

Red Crimson, on Wool or Silk.—Provide yourself with the following articles: alum $\frac{1}{2}$ lb., cream of tartar $\frac{1}{4}$ lb., Nicaragua wood $1\frac{1}{2}$ lbs. Dissolve the alum and tartar in four pails of water, in a brass or copper kettle; when boiling, put in the cloth, yarn, &c., and continue the boiling two hours, then take it out and cool and wash it. Fill the kettle again with water, put in the Nicaragua wood tied up in a bag, put in the cloth and boil one hour, take it out and wash it, and if you wish to change the color to crimson, add one ounce or more of pearlash to the liquor, and boil again for fifteen minutes.

Madder Red.—Soak the cloth, &c. as directed in the last receipt, then, instead of Nicaragua wood, put into four pails full of water, $1\frac{1}{2}$ lbs. of madder and $\frac{1}{4}$ lb. of the nitro-muriate of tin, and when blood warm put in the cloth and turn it continually till it boils, take it out immediately and

dip it into lime water, and turn it for a few minutes without boiling, take it out and wash it, &c. The quantity of dye mentioned in these receipts are calculated for about $2\frac{1}{2}$ lbs. of woollen goods.

Scarlet.—Firstly, color as directed for the most brilliant yellow, then take one ounce of powdered cochineal for every pound of cloth, and put it into the yellow dye from which the cloth has been just taken, or into a suitable quantity of clean water, with one ounce of murio-sulphate of tin. Put in the cloth, and boil it for fifteen or twenty minutes, wash and dry it as usual.

To color cotton red, with Brazil or redwood, Nicaragua wood or madder, it must be soaked in alum water, and otherwise managed as directed for yellow, the redwood, &c. being used instead of the quercitron bark.

(To be continued.)

TO DESTROY INSECTS ON FRUIT TREES.

Make a solution of the following ingredients, viz.

- 2 lb. soft soap
- 1 lb. leaf tobacco
- 1 lb. copperas
- 2 oz. nux vomica
- $\frac{1}{4}$ a gill turpentine

boil the whole in 8 gallons of water to six, and use it milk warm. Before putting on this solution brush every part of the tree with a soft brush, such as is used for painting: then with a sponge carefully anoint the body as far down as the roots, every branch, joint and angle. This operation should be performed between the falling of the leaves and the beginning of February, and it is said it will kill the eggs or ova of the insects.

As the revolution of a few weeks will bring about the period when this recipe may be fairly tested, would it not be well for some of our farmers who have valuable orchards to give it a fair trial. It could be done by leaving a few trees in each row untouched with the solution.

Now if this mixture will destroy the insects on fruit trees, might it not be equally salutary in removing those which infest and destroy the beautiful foliage of the graceful elm? We throw out the suggestion with a view of encouraging some gentleman to make the effort. If they can be preserved from the ravages of the deadly enemy who have for the last three years divested them of their ornament, every heart that can appreciate the luxury of a refreshing shade will rejoice. Will some gentleman who has the elm before his door try the efficiency of this prescription, and make report to us next year?

THE TIMES.—We scarcely open a paper that we do not see some startling narrative of *murder*, *suicide*, *riot*, or attempt to produce a servile insurrection in our country. These things owe the origin of the feelings which prompt them to some defect either in the physical constitution, or moral education of our people, or perhaps to both; but be the cause what it may, it should be the business of all friends of law and order to search it out and correct it; and as the evils spoken of are grievous and afflictive, such as no people can long endure, the corrective should be promptly applied.

FOREIGN ABSTRACT.

London dates to the 15th July have been received. The recruiting service of the Queen of Spain, was being carried on with great spirit in Ireland. A treaty has been concluded between England and Spain, for the more effectual suppression of the slave trade. In order to facilitate the settlement of the Irish Church bill, the King has officially relinquished all his interest in any benefices and ecclesiastical dignities of the Church of Ireland. The distress of the poor in Galway, Ireland, is such, that 18,000 females are said to be in a state of starvation. [How fare the males?] The Morning Chronicle complains of the coldness of the King towards his present ministers, and insinuates that his majesty has a bee in his bonnet—that is, demented, and as evidence of his being laboring under mental hallucination, it is stated that in swearing in Sir Charles Grey as one of the commissioners to Canada, the King gave personal orders to him at variance with those given by the ministers. If these things be true there is trouble ahead.

Twenty persons have been arrested at Paris, as being engaged in the conspiracy against the King. The leader is Bergeron, the person who, a year ago, was tried and acquitted for firing a pistol at the King. The persons implicated had a magazine of arms on the road to Neuilly, with the intention, it is thought, of constructing an *infernal machine* to blow up the King's carriage, on his return from or journey to his suburban villa at the bridge.

The cholera was raging frightfully at Toulon.

LIVERPOOL COTTON MARKET, Wednesday, July 15, 1835—Sales—Tuesday, 1500, and to-day 3000. There has been a little more business done in the market this week; holders of Surats and American cotton show considerable firmness, but in Egyptian and Brazil this is not the case; the quantity of cotton offering is large, and there is a great desire to sell; and, in consequence, prices have given away a little, and are yet very unsettled. 300 Pernams have been sold to-day at 11 $\frac{1}{2}$ d per lb, the highest sold at 16 $\frac{1}{2}$ per lb, and Egyptian are now 17 1-8 per lb, which were 21d. The week's imports amounts to 16,334 bags.

Cure for hoarseness.—One drachm of freshly scraped horse-radish root, to be infused with 4 oz. of water, in a close vessel for two hours, and made into a syrup with double its weight of vinegar, is an approved remedy for hoarseness; a teaspoonful has often proved effectual—a few teaspoonfuls it is said has never been known to fail in removing hoarseness.

CONTENTS OF THIS NUMBER.

Directions how to preserve mulberry plants from frost—notice of Mr. Robinson's essay on grass—notice of Gama Grass—recommendation to cultivate Scotch Kale—notice of some superior mulberry seed—notice of Major Adlum's essay—notice of Mr. Sinclair's choice pigs—notice of an article on coloring or dyeing—remedy for worms in the heads of sheep—Mr. Robinson's essay on grasses—account of the culture and product of Gama Grass—Major Adlum on the discovery of the use of Plaster of Paris—method of wintering sheep—proceedings of the Maryland Horticultural Society—a wash for fruit trees—the times—Foreign abstract—cure for hoarseness—prices current, bank note table, &c.—advertisements.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM.	TO.
BEANS, white field,	bushel.	2 50	
CATTLE on the hoof,	100lbs	5 50	6 00
CORN, yellow,	bushel.	75	77
White,	"	75	78
COTTON, Virginia,	pound.	18	
North Carolina,	"		
Upland,	"	18 1/2	20
FEATHERS,	pound.	37	40
FLAXSEED,	bushel.	1 25	1 7 1/2
FLOUR—EAL—Best wh. wh't fam	barrel.	7 25	7 75
Do. do. baker's,	"	6 75	7 25
Do. do. Superfine,	"	6 12	6 37
Super Howard street, dull	"	6 00	
" wagon price,	"		5 75
City Mills, extra,	"		6 12
Do.	"		6 00
Susquehannah,	"		5 87
Rye,	"		5 00
Kiln-dried Meal, in hhds.	hhds.	20 00	
do. in bbls.	bbl.	4 37	4 50
GRASS SEEDS, red Clover,	bushel.	5 00	5 25
Timothy (herds of the north)	"	2 50	3 00
Orchard,	"	1 50	2 50
Tall meadow Oat,	"	2 00	2 50
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.		15 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
HOGS, on the hoof,	100lb.	6 75	7 00
Slaughtered,	"		
HOPS—first sort,	pound.	12	
second,	"	10	
refuse,	"	8	
LIME,	bushel.	33	35
MUSTARD SEED, Domestic,	"	5 00	6 00
OATS,	"	35	38
PEAS, red eye,	bushel.		
Black eye,	"		1 25
Lady,	"		
PLASTER PARIS, in the stone,	ton.	scarce	3 25
Ground,	barrel.	1 37	
PALMA CHRISTA BEAN,	bushel.	2 00	
RAGS,	pound.	3	4
RYE,	bushel.		75
Susquehannah,	"	none	
TOBACCO, crop, common,	100 lbs	4 00	5 00
" brown and red,	"	5 00	7 00
" fine red,	"	7 00	9 00
" wraperry, suitable	"		
for segars,	"	5 00	10 00
" yellow and red,	"	8 00	12 00
" yellow,	"	9 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	4 00	
" ground leaf,	"	5 00	8 00
Virginia,	"	5 00	10 00
Rappahannock,	"		
Kentucky,	"	8 00	14 00
WHEAT, white,	bushel.	1 25	1 30
Red,	"	1 15	1 25
WHISKEY, 1st pf. in bbls.	gallon.	38	
" in hhds.	"	37	
" wagon price,	"	33	33 1/2
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 50	
To Wheeling,	"	1 75	
Wool, Prime & Saxon Fleeces, ...	pound.	62 to 75	32 to 34
Full Merino,	"	52	62 30 32
Three fourths Merino,	"	47	52 28 30
One half do.	"	42	47 26 28
Common & one fourth Meri.	"	38	42 25 26
Pulled,	"	38	42 26 28

VALUABLE STOCK FOR SALE.

A FULL-BRED Durham short horn yearling BULL, a very superior animal; a 7-8 blood, same age; also two COWS, 4 years old, 3-4 blood, in calf by a full-bred Bull. Pedigrees given in full. Applications for any of the above cattle to be made to the Editor of the Farmer and Gardener, by whom the terms will be made known. Letters from a distance must be post paid. June 30th.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.		
BACON, hams, new, Balt. cured...	pound.	11	11 1/2
Shoulders,	"	10	
Middlings,	"	10	
Assorted, country,	"	9	9 1/2
BUTTER, printed, in lbs. & half lbs.	"	18 1/2	25
Roll,	"		
CIDER,	barrel.		
CALVES, three to six weeks old...	each.	3 00	6 00
COWS, new milch,	"	17 00	30 00
Dry,	"	8 00	12 00
CORN MEAL, for family use,	100lbs.	1 75	1 81
CHOP RYE,	"	1 62 1/2	1 75
EGGS,	dozen.		
FISH, Shad, No. 1, Susquehanna, ..	barrel.	7 75	
No. 2,	"	6 75	
Herrings, salted, No. 1,	"	4 25	
Mackerel, No. 3,	"	4 50	
Cod, salted,	cwt.	2 25	2 75
LARD,	pound.	10	10 1/2

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

		VIRGINIA.
U. S. Bank,	par	Farmers Bank of Virginia, 2a
Branch at Baltimore,	do	Bank of Virginia,
Other Branches,	do	Branch at Fredericksburg do
MARYLAND.		Petersburg,
Banks in Baltimore,	par	Norfolk,
Hagerstown,	1a	Winchester,
Frederick,	do	Lynchburg,
Westminster,	do	Danville,
Farmers' Bank of Mary'd, do	do	Bank of the Valley,
Do. payable at Easton,	do	Branch at Romney,
Salisbury,	5 per ct. dis.	Do. Charlestown,
Cumberland,	2a	Do. Leesburg,
Millington,	do	Wheeling Banks,
DISTRICT.		Ohio Banks, generally 3a 3/4
Washington,		New Jersey Banks gen. 1 1/2a 2
Georgetown,	Banks, 1/2	New York City,
Alexandria,		New York State,
PENNSYLVANIA.		Massachusetts,
Philadelphia,	1a	Connecticut,
Chambersburg,	2a	New Hampshire,
Gettysburg,	do	Maine,
Pittsburg,	1 1/2a 2	Rhode Island,
York,	1a	North Carolina,
Other Pennsylvania Bks. 1 1/2a 2		South Carolina,
Delaware [under \$5],	3a 4	Georgia,
Do. [over 5],	2a 1	New Orleans,
Michigan Banks,	5a	
Canadian do.	5a	

GRASS SEED.

Fresh ORCHARD GRASS, HERDS and TIMOTHY SEED, just received and for sale at the Maryland Agricultural Repository, Light st.

ag 25 Successor to SINCLAIR & MOORE.

WHITE ITALIAN MULBERRY SEED.

THE subscriber has just received and offers for sale at FIFTY CENTS per oz. a superior lot of White Italian Mulberry Seed, of the growth of the present year, (1835.) As this seed is fresh, and has been selected by a competent judge of the article, it can be recommended to such gentlemen as may desire to enter into the business of the Mulberry and Silk culture, with confidence. And as the present is a proper season for sowing the seed, the opportunity of securing a supply should not be permitted to pass by unimproved.

R. SINCLAIR, Jr.
aug 18 at seed store connected with this office.

THE AMERICAN FARMER.

FOR SALE, at the office of this paper, a few complete sets of the above valuable work—a work which in itself is a perfect Farmer's Library. Gentlemen who may be disposed to possess themselves of a copy will do well to apply early. aug 4

CYLINDRICAL STRAW CUTTERS.

THE SUBSCRIBER offers for sale at the Maryland Agricultural Repository, Light street, near Pratt street, these superior machines for cutting straw, hay, corn tops, and stalks, &c. and suggest to those having much stock that great saving of food may be made by the use of this expeditious mode of converting the rough forage into proper form for the food of animals, and particularly advantageous in a season like the present, when grain is scarce and high. The smallest size is

11 inches wide, price \$27.
Extra Knives per pair 4.
14 inch Box, price 45.
Extra Knives per pair 5.
20 inch Box adapted to horse power 75.
Extra Knives per pair 8.

Subject to discount of 5 per cent. for cash payment.
JAMES MOORE,
successor of Sinclair & Moore.

August 25th.

"CRIBBES" LARGE SCOTCH EARLY YORK CABBAGE—CROP OF 1834.

I have now the pleasure to offer to the market Gardeners, Farmers, and others, very superior Cabbage seed for fall sowing, which is just received and has been procured by great perseverance from a "crotch market" gardener, near Edinburgh, who is the only raiser of "CRIBBES" LARGE SCOTCH EARLY YORK CABBAGE—a fine dwarf variety, much larger than the English Early York, and equally early.

"LARGE BERGEN CABBAGE."

This is a Cabbage of fine size and great delicacy, grows considerably larger than the "Bullock's-heart" Cabbage, is a more certain crop, and first rate second crop variety—also EARLY PARIS DWARF, a very early dwarf cabbage; LONDON BATTERSEA, BULLOCKS HEART, SAVEY CABBAGE SEED, &c.

ag 25 ROBERT SINCLAIR, Jr.

STRAWBERRY PLANTS FOR SALE.

I HAVE a fine stock of good strong plants of the following kinds of Strawberries, which can be put up and packed carefully, so as to forward to order in safety, any reasonable distance from this Nursery.

ROBERT SINCLAIR.

LARGE EARLY SCARLET, } per doz. 2 cts., per
Do. PINE APPLE, } hundred \$150. For
500 plants and upwards, 20 per cent discount
from the above.

English Red Hautbois,
New Black Musk do.
Falkener's New Early Pine,
Large Scarlet Lima,
Downton's Scarlet Pine,
Wilmot's Superb,
French Alpine,
Red Monthly Alpine,

Per doz. 50 cts.

Red Monthly do. without runners, for 4 plants, 50 cts.
August 17th, 1835.

CABBAGE SEED, &c.

FOR SUMMER AND FALL SOWING.

JUST received, an additional lot of Early York Cabbage Seed of the Scotch short stalk variety, imported from Edinburgh. This cabbage is full as early as the English Early York, larger head, very dwarf, and is decidedly superior to all early cabbage seed for fall sowing. Also, Early dwarf Paris, Early Battersea, Early George, Flat Dutch, Savoy and other Cabbage Seeds. Large Holland Cauliflower and Kale Seed, of various sorts, among which is the Delarave Kale, the best sort for fall sowing, color dark green, tinged with purple, the leaf tender and curled.

IN STORE,

Corn Salad, Curled Endive, early Curled Cilicia, brown Dutch and large white head Cabbage Lettuce seeds; black and white Spanish and Yellow Turnip Radish seed for fall sowing, the latter a superior new sort, and will produce well if sown out at any season of the year.

Will be in store in a few days, the Pye Plant or Tort Rhubarb seed, producing a very choice vegetable, and should be cultivated in every garden.

R. SINCLAIR, Jr.

aug. 11 At seed store connected with this office.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 18.

BALTIMORE, MD. SEPTEMBER 1, 1835.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, SEPT. 1, 1835.

SILK MANUAL.

SINCLAIR & MOORE & ROBERT SINCLAIR, Jr.
Proprietors of the Farmer and Gardener,

HAVE NOW IN THE PRESS,

And will speedily publish, A SILK MANUAL, containing—1. a brief historical view of the silk business—2. directions for sowing the Mulberry seed, nurturing the Mulberry plant, transplanting it into hedges, or standard orchards, and the subsequent management thereof—3. the mode of preserving and hatching the silk-worm eggs; the manner of rearing and feeding the worms, the mode of airing the laboratories, and the prevention and treatment of their several diseases—4. the manner of constructing a cheap laboratory or cocoonery—5. the process of reeling, dying, and making sowingsilk, twist, &c. together with calculations of the probable nett produce of given quantities of land set in Mulberry, as tested by actual results, both in this country and Europe, with such appropriate remarks as may suggest themselves to the editor. The whole written, compiled and extracted from the most approved and standard works, European and American, by the editor of the Farmer and Gardener.

It will contain a copious index, and will be published first in pamphlet form, and afterwards faithfully copied into this Journal.

Orders for the above work will be received, post paid, for any number of copies, by either the editor or proprietors. As the number of copies in pamphlet form will be limited, persons wishing to secure a supply will do well to make early application.

BOOKSELLERS, POSTMASTERS AND STORE KEEPERS at a distance, can have their orders promptly filled.

From the deep and profound interest felt in every direction for the promotion of the Mulberry and

silk culture, the publishers thought it due to the business, growing every day, as it is, in importance, and promising ere long to be one of the chief national staple productions, that they should prepare a cheap and safe manual, from which every agriculturist, of ordinary intelligence, might gain sufficient information to enter into the business without risk of losing by inexperience or want of knowledge. Thus influenced, they proceeded on in their labors, and are gratified in being able to announce the work as being in the hands of the printers, and cheerfully look to the patriotic husbandmen of the country, for whose benefit it was undertaken, for remuneration.

EDITORS OF PAPERS with whom we exchange; and others, are respectfully requested to copy this article or make some notice of it.

GROWING RICE ON DRY LAND.

Having read in the second volume of the Farmer's Register, an essay on the above subject, and knowing from its ear-mark that it proceeded from the pen of an old and highly valued correspondent of this journal, residing in the state of Alabama, we addressed him, at the instance of some of our patrons residing on the eastern shore of this state, a series of queries touching its culture on dry land and probable adaptation to the climate and soil of Maryland. His answer will be found in another column as well as the article to which he refers, and we shall follow it in our next with an essay, also from the same experienced pen and able head, embracing the author's views "on rice bread, and on corn mixed with other crops," which, together, will form a most valuable compendium upon this particular branch of agriculture. The subject is one of deep importance, and we doubt not will so present itself to every agricultural reader. Than rice there is no greater delicacy or more delicious vegetable, and from all past experience there is none more nutritious or healthful. When boiled to a jelly, sweetened with loaf sugar and spiced with nutmeg and cinnamon, it is one of the safest remedies which can be used as an auxiliary in dysenteric or other affections of the intestinal canals. If without interfering materially with the amount of production of the crop, it can be raised in the corn field, how much will be added to the luxuries of the table, should each farmer or

planter devote an acre, or even less, to its cultivation in connection with that grain. Those farmers' ladies who have partaken of the various delicacies into which this grain is susceptible of being converted, or who may be familiar with their method of preparation, we are sure will use their potent influence to determine their husbands in favor of the experiment.

PRESERVATION OF BIRDS.

Dr. Bradley, in his excellent work upon gardening, in an essay combatting the prejudice existing at the period of his work, against birds, begs leave to "be an advocate for these innocents who cannot speak for themselves," and affirms "that instead of being nuisances they are blessings, and that without them, we should be like the land of Egypt under the curse; that the grasshoppers would come and caterpillars innumerable, and would eat up all the grass in our land, and devour the fruit of our ground, and multiply so exceedingly as to creep into our King's palaces; and flies would so abound, as to be extremely incommodious to us."

In proof of the soundness of his proposition, he adduces the following fact, which came under his own observation:—he says:

"In order to make some estimate of their services, I have lately observed a couple of sparrows who had young ones, and made twenty turns each per hour; and reckoning but twelve hours per day, let us compute what a number of those vermin were destroyed by that nest." Assuming the fact that each of those birds caught a caterpillar each turn, and that they fed twelve hours each day, he says "that in 7 days between hatching and flight, this one nest destroyed 3360 in one week."

If but a tithe of what Dr. Bradley claims for these birds be true, and we do not question the statement at all, birds or such of them as live on insects, are of incalculable value to farmers and gardeners, and instead of being destroyed should be preserved by all practicable means. Their services in an orchard or garden is indispensable, and we think it may be said in their favor without shaming truth, that they are the best destroyers of insects that can be employed. Without going to the full extent of Dr. B's. assertion that without the aid of birds, "the grass-hoppers would eat up all the grass in the land," we can very readily conceive that their devastations would be alarmingly great; for it is but a few days since while inspecting a farm belonging to a gentleman

a short distance from town, we were shown a small patch of a few yards of second growth clover, which had been left uncut, that was *literally* divested of every leaf, and on which there were nothing standing but the stems. We have of late years read several very sensible essays upon this subject, and, from our own personal observation, are forced to the conviction that all birds which feed upon insects, are objects worthy of the care and preservation of every one engaged in the cultivation of the earth. We would except the *Partridge*, *Woodcock*, and *Snipe*; for though the first, to some extent, do feed upon insects, they are more essentially grain-eating in their propensities, and the two latter feed upon such insects only as are found in untilled marshes, and, of course, do no injury to cultivated vegetation; but above all other considerations, they afford such exquisite pleasure to man in the pursuit of them, that we are sinister enough to enter our protest against all plans, which embrace them in their preserving reservations, and we think we shall be sustained by every individual who may ever have witnessed the performance of a brace of staunch well trained dogs, in a stubble field, willow bottom, or open marsh. But before we close this article, we would remark, that the practice of shooting in orchards should be abandoned, as the wounding of the trees inevitably lead to injurious bleeding, corrosion, gangrene, and ultimate death.

GAMA GRASS.

We insert in the present number another article upon this subject, from the pen of Mr. James Shannon, and it will be perceived that there is a difference of opinion between him and our correspondent, *Agricola*, with respect to the quality of the grass: while the former pronounces it a *succulent* grass and backs that opinion by the fact that in being cured into hay, it lost four-fifths of its weight; that is, that $2\frac{1}{2}$ lbs. of *green* grass, when dried, weighed but *half* a pound, than which a stronger evidence of its *succulence*, we should think, could not be adduced, or required. On the other hand "*Agricola*" asserts that he has cured it into hay at less than 50 per cent. loss of weight; and this fact is equally conclusive in support of the position he assumes, of its *not being a succulent* grass. But if this were not so, the additional fact which he mentions—of its being called a "*dry grass*," in South America, from the circumstance of its want of succulence, would go far to establish the truth of *Agricola's* assertion. Mr. Shannon mentions that there are *several kinds* of the Gama grass, and that he has *two kinds* himself: now this being the fact, may it not very readily account for the seeming discrepancy between the

opinions of these two gentlemen? May not the kind grown by our friend "*Agricola*" be the *dry* variety known to the South Americans? We have a single stalk growing in a flower pot, which is by no means what we would term a succulent grass, and this we presume is of the same variety as that cultivated by *Agricola*. The apparent discrepancy between those two intelligent farmers seemed to call for the remarks we have made, and content with what we have said, we shall leave the duty of further reconciliation to themselves.

In a letter enclosing his communication, our correspondent "*Agricola*" says:

"On my locating myself in this section of country, I early discovered the want of some species of *grass* for winter forage for our animals, for the purpose of pursuing a more judicious system of agriculture. In my pursuit, the *Gama Grass* came within my knowledge, and as soon as possible I procured it, and on discovering its value, I immediately gave all I knew of it to the country. Truly "a little fire kindled a great matter," but the value of this vegetable production, I believe is pretty well settled in the south, and it will add singularly to my gratification if it should be found to succeed in the north.

One thing I have observed with a momentary regret—that no one notices to the public the singularly delicate and excellent food it affords for an animal at *fifteen days growth*. Its flavor at that stage is uncommonly fine. It is perfectly without the *redundant* succulence of other grasses; has all their *tenderness*, and if the evidence of the animals "will be admitted on the trial," nothing yet known can exceed it."

The solicitude manifested by our friend for the success of the *Gama grass* in this quarter, seems, in the spirit of reciprocal good feeling, to require that some of the many gentlemen who have sown it, should communicate how it stands our climate, and what prospect there may be of its being ultimately adopted into our system of husbandry.—Communications of the kind, from sensible practical men, never fail to advance the cause of husbandry, increase its lights, and to elevate those who make them in the moral and social relations of life.

THE LOCUST TREE.—The people of Massachusetts are turning their attention to that most durable and valuable indigenous tree, the locust—so valuable for ship building, posts, &c. The Society of agriculture, at Northampton, lately awarded Mr. Clark a premium of \$20 for his success in cultivating a plantation of this tree, which though it flourishes so well throughout the north, has hitherto been chiefly used as an ornament, except we believe, on Long Island in this state, where there are extensive groves of it. Some of the posts we have seen there, of this wood, were 100 years old, and scarcely in the least changed by constant exposure.—A great deal of the locust is raised in Tennessee, and in the west generally.—*N. Y. Star.*

WORK FOR SEPTEMBER.

On the Farm.

This is the month when much should and *must* be done to ensure present and prospective comfort—the ground if not already prepared must be got ready for winter grain. Of *wheat* we would remark, that if sown on a clover lay, it will always be best to plough some time before seeding, as the experience of observing agriculturists justify the belief, that the fermentation consequent on the immediate turning in of such a body of vegetable matter, is of too heating a character to be healthful to the newly germinated plant, which is always delicate for some days. Two or three weeks would probably be enough to avoid this injurious effect; and, as good authorities advocate ploughing in the seed wheat with a shallow furrow as those who direct that it should be harrowed in; but most all agree that the field should be *rolled* as smooth as possible. This operation, besides bringing the earth in contact with the grain, and thus promoting its vegetation, provides a fine smooth surface for the reapers the ensuing harvest, a thing always desirable in an economical point of view, and greatly tending to the comfort of those who labor in the field.

If sown on a corn field, as soon as the corn is sufficiently advanced to admit of it, that is as soon as the grain is ripe enough to harden, the stalks should be cut down, bound up and removed off the field and shocked. The hills, if there are any, should be harrowed level, the field ploughed three or four inches deep, then put on a top dressing of well rotted manure, decomposed leaves from the woods and lime or ashes, of equal parts, to be evenly spread over the surface: then sow your wheat, harrow in and roll. Advantage has been found in passing the harrow over the field in the spring soon after the frost is out of the ground, when the grain is from five to six inches high.

Less than 5 pecks of seed wheat should not be sown, and from 6 to 8 pecks, (to be regulated by the soil) may be sown with decided advantage. The seed should always be well washed, and soaked in a *lye* made of wood ashes, or in lime water, for about four or five hours, and after being taken out should be rolled in slacked lime or plaster of paris, before being sown. Two or three quarts of either will be sufficient to envelope a bushel of the kernels of the wheat. Besides destroying the smut on the grain, this treatment adds greatly to its germination and vigorous growth, things of immense moment in keeping down weeds and troublesome grasses.

That *lime* is the *proper food* of wheat, there is

but one opinion now, therefore, every one who can possibly do it, should procure it for his wheat crops—if it only be in the proportion of a few bushels as a top-dressing, and if lime or some other *calcareous* substance is not to be had conveniently, he should sow *buckwheat* to turn in, that containing about 50 per cent of lime.

Winter *Rye* should now be put in, the preparation of ground and seed very similar as for wheat except that it requires less manure, and that gravelly or stony ground is best—from 1 to 2 bushels of seed may be sown.

But while the farmer is putting in his *Rye*, as a crop, may we be permitted to ask him, as the friend of his cattle, to sow two or three acres to be used as green food for them in the spring?

Turnips.—If by accident your turnips are not in, you may still make a *saving* crop by immediately preparing your ground and sowing them—taking care to give them, besides the usual manure ploughed in, a *good top dressing of leached ashes*, and after the plants are up, a sprinkling of soot or slaked lime—say one bushel to the acre.

The cutting of the tops of corn will speedily claim the attention of the farmer, and in the course of the month the pulling of his blades, where the practice of cutting up the stalks do not prevail—and let us say that the *fodder* pulled before it becomes *dry* and *burnt*, is infinitely more fragrant, nutritious and grateful to the animal.

The farmer too, should employ all his little *bread-eaters*, who are too small for heavier work, in gathering weeds and conveying them to the dung-heap, where they should be covered with earth—say not this is too troublesome—nothing is troublesome, which an industrious heart wills to be done.

Turn your hogs into your orchards to eat up the fallen fruit, and with it millions of those worms and insects, which would, the ensuing season, prey upon your trees.

The Kitchen Garden.

Your *Cabbages*, and such other vegetables as may require it, should now be hoed. Sow your Early Yorks and the other early varieties, as also Cauliflowers; prepare and plant out your Strawberry beds; earth up your Celery; sow cress, lettuce, onion, radish, shallots, spinnach, every week or ten days; and now is a good season for increasing your herbaceous plants, by parting the roots. Don't spare your hoe, but use it freely until you have exterminated every weed within your garden.

The Flower Garden.

Give your green house a thorough and searching cleansing. Give the wood work a coat of paint—whitewash the whole interior, giving the

flues several coats—let your staging be well white washed.

The *herbaceous plants*, as well as the *large trees* which were put in new earth, should be sparingly watered, say once a week.

If a few of each kind of geraniums be now lifted and put into pots, their blossoming may be greatly prolonged in the green house.

Bulbs intended for the house should be potted towards the end of this month. The young *Viburnums* should be repotted: so should the lilliums as soon as they begin to grow.

The *Dahlias* should now be supported by stakes, and if the weather should be dry they should be liberally supplied with water.

Prepare your borders and beds for bulbous roots: tie up Chrysanthemums, Tube roses and such other flowers as require it: bring your Carnations and Pinks, which were potted last month, from the shade. As in the kitchen garden, ferret out and destroy every weed; let not one remain to tell the tale of your slovenliness.

A MAMMOTH CABBAGE.—We were shown on Friday last a cabbage raised in the garden of Mr. William Ellicott, Ellicott's Mills, weighing 19 lbs. and measuring five feet around the girth. This cabbage, we should say, was of the *drum-head* variety, and judging from the manner of its yielding to the pressure of the hand, we think it had not yet attained near its growth; but as it was, it was a most singularly large and luxuriant vegetable, and regret that it had not been saved for seed, our opinion being clearly made up, that it is by selecting such specimens of the various families of vegetables for seed, that improvements are to be effected. We understand that the bed where this huge vegetable mountain was taken, contained many others of extraordinary growth, and that the general appearance of the garden evinced much horticultural taste and enterprise in its enlightened proprietor; for which he deserves the thanks of every one who can appreciate the labor of those who "are the chosen people of God," "whose breast," in the language of Mr. Jefferson, "he has made his peculiar deposit for substantial and genuine virtue,—and who form "the focus in which he keeps alive that sacred fire, which otherwise might escape from the face of the earth."

[From the Maine Farmer.]

WINTER WHEAT.

Those who have succeeded best in this State with the winter wheat, have sowed it as early as the middle of August. As yet it is a very uncertain crop among us; but because it is so now, it does not follow as a matter of course that it always will be. It is necessary that the seed should

be acclimated—that it should be naturalized to our climate, and to do this no other plan can be pursued with success than to sow the product of one year for the crop of the next. Here many who have begun the culture of winter wheat have failed. They have procured their seed probably from New York, or from some state farther south, sowed it and awaited the result with much anxiety.—Perhaps they reap a small crop, we will say just get back their seed. This discourages them and they give it up as an unprofitable and hopeless pursuit. Now instead of doing thus, they should save this same seed and sow it again, and so continue sowing the product for a series of years. This is the only way in which it can be acclimated, and that this may be done successfully we have not the least doubt. Indian corn when brought from the South will not ripen here, and yet it has been rendered perfectly suitable to our climate, and indeed much farther north than we are, changing its habits and characteristics according to the latitude, and passing through insensible gradations from the tall and gigantic corn of the South, to the small and hardy kind of the Canadas. It is true that Indian corn is an annual, and does not have to stand the winters any where—but what then? Is the change which it has undergone the less striking. It is not possible to have wheat perfectly winter proof, even in the most favored climes of South and West, the Planter not unfrequently finds that the ravages of winter have blighted his hopes by destroying his wheat. Will not those who have already begun in the cause of rendering Maine independent as it regards bread stuff, persevere in this business of cultivating the winter variety of wheat, and those who have means and inclination to assist begin this month. Even if they should not succeed during their life time, they may leave a valuable legacy behind them; for certainly none could be more valuable than one which would be the means of lessening the toil of the farmer, and at the same time increasing his profits.

Remarks by the Editor of the Farmer & Gardener.

We do not believe that there can be any thing in difference of climate between the latitude of New York and that of Maine, to require that the wheat grown in the former state, should undergo the process of acclimation for several years, in order to prepare it for cultivation in the latter.—Wheat raised in Chili, and other warm countries, succeed in almost all parts of our country, without any difficulty. This being the case, we are inclined to believe that the failure of the wheat crops in Maine, must be ascribable to some other cause than want of acclimation on the part of the seed drawn from the state of "New York, or from some other state farther south." May not the true cause of failure be found in the absence of some quality in the land necessary to the successful growth of this staff of life. With us, what are called limestone lands, that is, soils impregnated with lime, are infinitely better adapted to the culture of wheat than any others, and so

far as all experience goes, *lime* and *ashes*, *marl* and *oyster shells*, burned or pounded, are the happiest applications of manures to this particular plant. It was remarked during the last spring by that accomplished agriculturist, Dr. *Ruffin*, that the wheat sown in lands in the tide water district of Virginia, which had received dressings of *marl*, withstood the severity of the last winter's frosts much better than those which had not. This fact would seem to go far to prove that the pre-existing opinion in favor of its appropriateness as a manure, was well grounded, and hence we incline to the belief, that it may be possible it is the absence of *lime* in the soil of Maine, which fits it so indifferently for the growth of this grain.

The fact of the Indian corn brought from the south accommodating itself to the climate of Maine, and having passed "through insensible gradations from the tall and gigantic corn of the south, to the small and hardy kind of the Canadas," would seem, on the first blush, to sustain the position assumed with respect to the wheat: but there is a material difference in the habits and constitutional predilections of the two plants. While wheat delights in soil either naturally, or artificially charged with *lime*, in some one of its forms, corn will grow and vegetate luxuriantly in any soil, being indifferent as to the *kind*, and only seeking nourishment of some sort or other, with a sun sufficiently warm to nurture its fruit into maturity. May not this essential difference in the habits of the two plants, account for the success of the culture of the one, and the failure of that of the other?—Whether we are correct or not in our suggestions, would it not be worth an experiment to test its truth? Let a portion of a field be *limed* and the rest *not*, and the result noted. Could not our friend of the *Maine Farmer* set such an experiment on foot, and let us hear from him in the spring? If he should be so fortunate as to succeed, it will prove not the least attractive feather in his cap, and if he fails, the consciousness of having been actuated by a noble motive, will animate and cheer him in the hour of defeat.

[For the Farmer and Gardener.]

CULTURE OF RICE ON DRY LAND.

I cannot doubt but Rice can be raised in the state of Maryland, as I raise it, amongst corn—that is, the same *upland rice* we raise in this state, and which is apparently the same grain, as the water raised rice of South Carolina. I will send you a specimen by mail, with which you can make the trial—planting in the next *March*—about the last of that month.

The kind of Rice we prefer, is called here the "*Big White*,"—a *Red bearded* variety, by some, is held superior for *production* and use.

In the last No. of the "*Farmer's Register*," you will see the detail of its use and culture, &c.

—under the signature of "*Agricola*," communicated at the special request of the editor—please to look over it. If I knew how I could get it to you, it would afford me great pleasure to forward you a bushel, one *half* for seed, and one half for the purpose of seeing the delicious *bread* it can be made to produce—I am satisfied it may fairly be classed with table luxuries.

The *store Rice*, I should be afraid would not vegetate. I, however, never tried it. The seed we always sow, or rather *plant*, in the *hull*, or what is termed "*Rough Rice*."

Two gallons will plant an acre—and produce here 50 to 75 bushels, of *Rough Rice*, which in cleaning or hulling, loses one half—100 bushels has been made to the acre.

For other items, regarding this *singularly valuable grain*, see my communication before mentioned.*

Cutting the corn at the *ground*, and curing as recommended by Judge Buel, aids the rice in reaching maturity. The communication before alluded to will be followed by another, which leaves nothing unsaid, that I have to say on the subject.

AGRICOLA.

* Copied below.

ON MAKING RICE ON DRY LAND.

[From the Farmer's Register.]

In my paper on the subject of cultivating *corn*, I stated the article of *rice*, as entering into the crop. My reason in part, as you will have no doubt discovered, for introducing this article among others was that it is found not to affect in any unfavorable way, the growth of the corn, &c.; and also, that I have satisfied myself, from repeated trials, that this mode of raising it, is calculated to produce that grain in the greatest perfection.

The rice cultivated throughout this State on highland, is in every respect similar to the rice plant of South-Carolina. It is found to grow well in every soil we have, from the pipe clay ground of the pine woods, to the black fat limestone land of the great cane break. In the latter, however, it excels—although from some fair trials I have seen, and indeed assisted in making, I am compelled to believe that pine land, (gray) with a good red clay foundation, moderately prepared by manuring, lime, &c., will equal in production, for quantity or quality, even the fat black land of the great cane break. It is the most generous grain I know of—will meet successfully a greater variety of seasons and soil than any other. I know of no soil or situation perfectly unfavourable to its production, and it is never made, with our planters, any question in what land they will put it; but what spot is most convenient on the farm of the second year's land. On every species of pine land, with a little cow-penning, cotton-seed manure, or any other decomposed animal or vegetable matter, it grows luxuriantly, from four to five and a half feet in height, and produces astonishing crops of grain; say from forty to one hundred bushels of shell rice, that is rice with the husk on, per acre.

The rice produced on our uplands, I am satisfied, is superior in quality to the water-raised rice of Carolina—especially that which we raise on calcareous soils. When boiled in pure water it exhibits a most decided superiority in the glut-

nous over the watery principle. I could not possibly admit any comparison in the quality of the two productions. The grain of what we call the "*big white*," is remarkably large, both in hull and when cleaned—although the "*red bearded*" is by some thought superior. Both of these kinds, with the "*small white*," grow well on dry upland. The operation of hulling or cleaning, is performed with the common pestle and mortar, or in our little tub mills, by partially raising the stones when they become dull and want picking. I have had it cleaned under those circumstances, as handsomely as any table would require.

It may be proper to add, that in boiling the upland rice raised in this section of country, it is found to absorb, or to make a mass at least one-eighth greater than the rice of South-Carolina, or any other, where water is employed as an agent in its production.

The straw is found admirable winter forage for horses, mules, oxen, and cows; but especially for young cattle—and a prodigious mass of it is produced from an acre of land. A sheaf of rice passed through the cutting box and given daily, with her other food, to a milch cow, in the winter, is found to produce superior milk and butter. We raise it with so much ease, that we find it economy to give it to our poultry and pigs, for both of which it is admirable, given in the hull. It is thrashed out with great ease over a bench properly placed, or a barrel.

It is the first article I plant in the spring. If planted alone, and if planted as early as possible, it will be off the ground before the arrival of the *rice-bird*. Like other grain, I have found it superior, when cut (if for table use), just before it is perfectly ripe. In this case the straw is cured when still green, consequently, highly nutritious, and when cured still retains its colour.

In cultivating this grain the ground should be turned over in January—harrowed with the furrow, and the first favourable state of the *weather* and *soil* in February or March, lay the ground off in drills with a *half shovel*, for the purpose of having the seed deposited as deep as possible, so that after it is hilled up, the roots may be deep in the ground, and which, in case of a drought about filling time, will secure it. This last precaution has been the result with me of several experiments. The drills may be as near as eighteen inches apart, if the rice is cultivated alone, and it can be covered with a small board fixed to a scooter-plough stalk, or with the hoe or rake. The first is the most expeditious, and requires no other attention than to cover shallow. When six to nine inches in height, plough with a scooter between the rows with a small poney or mule, and finish it off with the hoe, drawing the earth to it. If the land is light and loose, one ploughing is sufficient—keeping the ground loose and clean is all that is required. It is cut with the sickle, in dry hot weather, and put up in sheaves the next day, and stacked or housed.

I have had it cut down with the frost twice in the spring without any bad consequences. I planted once in the *twelve* days, and made a fine crop, remarkable for weight. It was cut down by the frost twice; I was making experiments to defeat the *rice bird*, but found that planting in February, or even March, and cutting as before

stated, will always find the crop in the barn on his arrival.

I am assured that you will find no difficulty in raising this valuable grain in your vicinity. All difficulty as regards preparing it for table use, is done away, by substituting the wooden block in lieu of the stone—the first being furrowed out in the same manner. Attached to a small horse mill, for my own grinding, I have four pestles, worked in as many mortars, that would clean for a whole neighborhood.

Where I have ground to put in corn of the second year after being cleared, and especially if I can afford a little manure to the land, I would always raise my rice as before stated, with the corn. When the land is not disposed to produce grass, it is made with less labour, for the production, than any crop I know of.

AGRICOLA.

Alabama, March 15, 1835.

[From the Southern Whig.]

GAMA GRASS.

Mr. Jones—I feel it my duty to call the attention of my fellow-citizens to the invaluable article of Gama Grass. Will you permit it to be done through the columns of your paper? The public, as well as myself, have seen for the last few years, several publications on this subject, from respectable citizens in different States of the Union. I fear, however, that in many instances those statements have been regarded as exaggerations, and neglected accordingly. The result of the experiment which I have made, convinces me that I have never seen any thing written on the subject, which went beyond the real value of the grass. In January, 1834, I procured some roots from the late Judge Crawford, which had come from the seed the preceding May. I also obtained a few roots from the plantation of Dr. Neisler in this county, the native growth. In order to get as many plants as possible, I made a separate plant of every stem, that had the least fibre of a root. These plants I set out on an exceedingly poor spot at the distance of eighteen inches apart one way, and 24 inches the other. The only manure I applied was about a handful of half rotted pine shavings to each root. Last summer the plants were neglected, and the place was completely overrun with pumpkin and other vines. Last winter, as we all know, was exceedingly severe, and the spring unusually late. I think it was the middle of April before the grass began to put forth. On the first Monday in the present month, (May,) I cut from it a heavy crop of grass. On the third Monday of the same month, I cut it a second time, and its average length was then from 19 to 22 inches. The third crop is at the present time, on the fourth Monday while I am writing, from 12 to 14 inches long, the growth of just seven days. All who have published on this subject, say that it can be cut on the first of May, and every month till frost. This would give seven crops in the season, and if it were cut every four weeks, the last of the seven cuttings would fall about the middle of October. I believe from my experiment, that every three weeks it would yield a crop three feet high, on the poorest lands: that on which I have experimented being of that character. When I cut it last, I

weighed the produce of 4 roots, which yielded 2½ pounds green grass. After being thoroughly dried in the sun for three days, on the evening of the fourth, I weighed a second time, and found it to contain half a pound of hay of the richest fragrance, and I should say of the very best sort. It would appear to me that this was a great falling off, (though I am entirely ignorant on that point,) and that it was owing to the grass being so very young, two weeks, consequently very succulent. I do not believe, that at the age of four weeks the falling off in drying would be as great as five to one, as in the preceding instance. Be this as it may, the result is such as must satisfy the most sanguine, and the calculation is very easily made. The side of a square acre measures 208½ feet.—Planting the grass, as mine is planted, 18 to 24 inches, it will give 104 plants one way to the acre, and 139 the other, which multiplied together, the product is 14,456, the number of plants on the acre. Now, half a pound to four roots in two weeks, is equal to a pound in four weeks, or one-fourth of a pound to each root in that time. This will be equal to a pound and three-fourths of hay to each root at the seven cuttings. Multiply 14,456, the number of roots on the acre, by 1¾ pounds, the product of each, and you have 25,298 pounds of hay a year to the acre. This requires no further culture, after the roots are well set, than simply the cutting and curing. It must be borne in mind also, that my grass does not yet cover one-sixth of the surface. When the surface gets covered, I have no doubt the product will be at least 100,000 pounds a year to the acre. Let it be remembered also, that the experiment made by me, is by no means a fair one, either as regards soil or culture. I am satisfied that any person can obtain equal or greater results, on almost any soil, with very little trouble. There are several kinds of the Gama grass: I have two kinds; but the native, which I obtained from the plantation of Dr. Neisler, and which grows in scattered bunches all over the State, is vastly superior to the other. I have given you facts. Comment I consider unnecessary.

Respectfully, yours,

JAMES SHANNON.

RESTORATION OF DECAYED FRUIT TREES.

In the 2d vol. of Brady's "*General treatise of husbandry and gardening*," edition of 1826, p. 226, we find a very interesting chapter "concerning the helping decayed trees, with a method prescribed for bringing distempered ones to perfect health, with observations relating to dale mists," from which we make the following extract, being that part which relates to the first branch of the subjects treated of in the essay.

"So useful is the discovery of the sap's circulation in plants, that without that knowledge, there could be no reasonable method prescribed for the cure of distempers in trees, or for the renewing vigorous growth in such as are decayed: This is not only good in theory, but is excellent in practice, as I experienced in an operation upon some old dwarf pear trees, that were reduced to so great weakness, that their fruit, which should have weighed nine or ten ounces a piece was

hardly bigger than hazel nuts. Some of the trees were cankered a little above the roots; their shoots were poor and sickly, and I had so little hopes of their recovery, that I hardly thought it worth while to employ my labour or time about them; however, that I might not lose some of their kinds in their death, I contrived to inarch some of their best branches into free stocks, which I had by me at that time in good quantity.

About the end of August I picked out of my nursery about fifty of the largest pear stocks I had, most of which were in the thickest part two-thirds of an inch in diameter; these I carefully transplanted at certain distances from my sick trees, contriving always to have every stock within an easy reach of one of the best branches in my old trees.

The care I took in removing my stocks gave them little or no check, so that the following spring I inarched several branches of the old trees into them; to one old tree I had five stocks, to another four, and some had only two a piece. Most of my inlayed grafts or inarched shoots were perfectly joined with the young stocks in less than three months; and as several of them blossomed in the spring, the supply of good juices from the young stocks, which they were grafted into, so nourished the fruit that set upon them, that I had several pears even larger than I had observed before upon the old trees when they were in health; and the branches of the old trees nearest to every stock strengthened themselves, as did also in proportion every part of the old trees.

When the fruit was fit to gather, I happened to be travelling, which was the occasion that the inarched scions were not then cut from the old trees, but luckily remained all growing together. The following year, to my surprise, the old trees had got so much vigour from the strong juices of the young stocks which circulated through them, that they had all the juvenile appearance and healthful disposition of young trees: they shot with so much strength, that I then began to fear they were in danger of losing their bearing quality; and therefore I sawed the main stem of one of the old trees more than half through, and drove a wedge into the wound, which yet did but little good in checking the vigour of the tree; so that I was obliged to cut the old tree entirely from its root, leaving it only the young stocks to feed on, which it did with so much advantage, that it grew well and produced good fruit.

The other old trees were all equally invigorated by this practice, so that I was forced to cut off their communication with some of the young stocks, and thereby abridge their over luxuriance, which is always an hindrance to bearing: by this means the trees became more gentle in their vegetation, and disposed themselves to blossom and bear fruit. But I saw many inconveniences which they would yet be subject to, by being in the manner of dwarfs, as, that pear trees had three different modes of giving us bearing branches, some kinds would bear upon wood of one year, others of two years and others of three years old, so that it was difficult to keep some of them in a regular figure, and expect fruit from them; and besides, that every gardener was not either apprised of this in general, or else was not

experienced on the particulars, which sorts would blossom on one year's, which on two year's shoots, &c. and to prune all alike, would lose a great deal of fruit.

[From the Genesee Farmer.]

MOWING AND MAKING OF HAY.

As this is one of the most laborious parts of farmer's work, and is generally performed at the hottest season of the year, it becomes important to diminish these inconveniences as much as possible. For this purpose the mower should rise at break of day, and commence his work before sunrise; and he may easily perform half a day's work by nine or ten o'clock. His work will not only be less oppressive from the coolness of the morning, but by the dew upon the grass it will be more easily cut, than it would be otherwise, as every mower is aware. He may then rest himself during the hottest part of the day, while others who rose later are toiling under the burning heat of the noon-tide sun. And by two or three o'clock he will be sufficiently recovered from his morning's fatigue to commence his afternoon's work with freshness and vigor.

In mowing one of the first principles of economy is, to keep the scythe constantly sharp, and perfectly fast on the snath, as the least degree of looseness increases the labor to an oppressive degree. Grass should be cut as close to the ground as possible, as an inch at bottom will yield more hay than several inches at top. Hence the importance of smooth meadows. Lads and young mowers should not work in company with experienced workmen, as ambition often prompts them to attempt keeping pace with the others and to exert themselves to the injury of their health.

With regard to the time of cutting hay, whether early or late is best, a difference of opinion prevails. Experience and attentive observation however, show, that hay is best when cut late—after wheat harvest for instance—or when the seeds are approaching their time of ripening.*—Some kinds of hay, more especially clover, may be partial exceptions. Late cutting possesses several advantages. The hay is found to contain a greater quantity of effective nutriment, as is proved by the fact that cattle keep in better condition when fed upon it. It is also much more palatable, and is eaten with greater avidity by cattle and horses. In addition to this, it is much more easily made, requiring far less drying, and thus greatly diminishing both labor and care in the process. Nor is this all. The effect upon the roots which are to produce the succeeding crop is by no means to be overlooked. Many plants are destroyed by cutting off or mowing

them while in flower, which would be little injured if the operation were deferred till the seed is ripe; and it is not improbable that many grasses may be materially injured and retarded in their growth in the same way.

Grass beaten down by the wind and rain should however be in general cut immediately, because if neglected, it will rot, or acquire a disagreeable flavor, and become of little value.

MAKING HAY.

In fine weather, where the crop of grass has been suffered to stand so long as to become nearly ripe, and where the crop is not heavy, drying hay is attended with but little difficulty. But the state of things is often reversed. Heavy crops of green grass and clover must necessarily remain upon the ground until time is afforded them for drying, and where the season is wet, the process is often tedious and harassing. To obviate difficulties, a new method of drying hay has been recommended, and adopted to a considerable extent in England, and in some places in this country. It is that of *drying the hay in cocks*. Some account of this mode was published in the 25th number of this paper of the present year. The English mode of conducting this operation is as follows: the hay is put up into small well made cocks on the same day it is cut; the next day these remain untouched let the weather be wet or dry; on the third day they are opened, turned in a few hours, and again put up at evening; on the fourth day they are suffered to stand untouched; and on the fifth after being opened an hour or two are fit for the mow or stack. If the usual days for opening are rainy, or uncertain of continuing favorable throughout, the operation is deferred until the first settled fair day, and the work carried on from that time in all respects as before. The advantages of this method are these. The slight fermentation, or what is termed *sweating*, which takes place while the hay stands in cocks, causes it to dry nearly or quite as much when it is opened as it would if opened every day, consequently a considerable amount of labor is saved; the fermentation or heating which takes place in the cocks, diminishes its tendency to do so in the stack; and by shortening the time of open exposure, the color of the hay is much better preserved and consequently the quality; this is especially the case with clover, which is more injured by drying in the sun than any other kind of hay, the leaves often becoming so dry as to crumble to powder, while the stalks yet continue juicy and green. The care and anxiety of the business is also greatly diminished, because the hay left out each night and during rainy weather is in a condition to withstand every change, and a regular and certain course may thus be pursued through all kinds of weather.

In many, and perhaps in most cases, this mode of drying hay may be unnecessary in this country, where by means of mature crops, a hot sun, and the introduction of the horse rake, the whole operation is rendered but the work of a single day; but there are likewise many instances where this cannot be the case; as where large crops of clover occur; or where hay must necessarily be cut early; or where the season is wet; in these instances it may prove of the greatest importance; and we accordingly invite the attention of intelligent farmers to the subject.

MISCELLANEOUS

FEMALE FAITH.

BY MISS L. F. LONDON.

She loved you when the sunny light
Of bliss was on your brow;
That bliss has sunk in sorrow's night,
And yet she loves you now.

She loved you when your joyous tone,
Taught every heart to thrill;
The sweetness of that tongue is gone,
And yet—she loves you still.

She loved you when you proudly slept,
The guest of the gay;
That pride the blight of time has swept,
Unlike her love, away.

She loved you when your home and heart
Of fortune's smile could boast;
She saw that smile decay—depart,
And then she loved you most.

Oh, such the generous faith that grows
In woman's gentle breast;
'Tis like the star that stars and glows
Alone in night's dark vest;

That stays because each other ray
Has left the lonely shore;
And that the wanderer on his way
Then wants her light the more.

VIRTUES OF THE TOMATO.—A medical professor in one of the colleges of the west speaks warmly in favor of the virtues of Tomato. He says of it that in all those affections of the liver, and other organs, where Calomel is indicated, it is probably the most effective, and least harmful remedial agent known to the profession. That a chemical extract will probably soon be obtained from it which will altogether supersede the use of calomel in the cure of disease. That he has successfully treated serious diarrhoea with this article alone. That when used as an article of diet, it is almost a sovereign remedy for dyspepsia, or indigestion. That persons removing from the east, or north, to the west or south, should by all means make use of it as an aliment, as it would, in that event, save them from the danger attendant upon those violent bilious attacks to which almost all unacclimated persons are liable. That the citizens in general should make use of it, either raw, cooked, or in form of a catsup with their daily food, as it is the most healthy article of the *Materia Alimentaria*, &c.—[N. Y. Times.]

RECIPE FOR MAKING TOMATOES CATSUP.

Cut the tomatoes up finely, and between every layer sprinkle a layer of salt, let them stand a few hours before you boil them, which do very well, then strain them through a cullender, add horse radish, mustard seed, ginger, pepper, cloves and mace, cover the vessel close and let the whole stand a day or two, when it must be bottled and sealed for use.

Some persons add bruised onions or garlic to the other seasoning.

METHOD OF DESTROYING CHICKEN-HAWKS.

Take a common steel rat-trap, bait it with a dead chicken, place it on a plank fixed upon the top of a pole about 12 feet high, and by carefully watching you may soon rid your place of these destructive birds.

METHOD OF DESTROYING CROWS.

Steep the entrails of pigs, fowls, or other ani-

[*Remark by the editor of the Farmer & Gardener.—Notwithstanding the high estimate we set upon the opinion of the editor of the Genesee Farmer, we should prefer cutting grass intended for hay when in flower. It is more fragrant and grateful to animals, and we are not convinced that it is not equally nutritious. What, we would ask, would clover be worth as hay if left in the field until the seed was ripe? Where would be its leaves?]

mals, in the lees of wine, into which has been infused a quantity of *nux vomica*, and throw the bait where the crows resort of a morning or evening; this will so intoxicate them that you may catch them with ease.

DOMESTIC SUMMARY.

The rail-road between Baltimore and the city of Washington was formally opened on the 25th ultimo. The repairs of the National road between Cumberland and Wheeling are rapidly advancing to completion. When finished it will be an unbroken line of Macadamised road between those points. The people of Pittsburgh as well as those of Baltimore have formed city guards to aid the civil authorities in the suppression of mobs. A great fire attended by loss of lives occurred at N. York on the 25th ult. The spirit of fanaticism and misdirected philanthropy, which has thrown the whole of the southern states into a ferment, is met, we are proud to see, with a bold and determined resistance in most of the northern and eastern states. Meetings have been held in the cities of Philadelphia, New York and Boston, and others are being held in other places in those states, condemning, in language which challenges respect, because it breathes the spirit of indignant patriotism, the proceedings of those who would consign a whole people to the *tender mercies* of a servile war. The English emissary *Thompson* and his infamous aiders and abettors, must be taught that the peace and quiet of thirteen millions of people are not to be trifled with without incurring an *awful* responsibility. Men who preach the doctrine of rebellion and treason should be punished as *traitors*. Peaches brought \$12 a bushel in the Philadelphia market on Friday last.

FOREIGN ABSTRACT.

The intelligence from England is to the 24th July. A Canadian loan to the amount of £400,000 sterling has been negotiated in London for the construction of canals and improving the navigation of the St. Lawrence. The Irish coercion bill has expired by limitation. The sufferings of the poor in Ireland are represented of the most distressing character. In the county of Mayo more than 7,000 persons are said to be destitute of clothing, and upwards of 8,000 are sleeping on the bare ground, suffering the pangs of hunger. Disturbances were rife in Armagh, Belfast, Enniskillen and various other places.

The French received a severe check near Algiers by an Abchib on the 27th June. The loss in killed was 500, and the routed Frenchmen were unable to bring off their baggage and wounded. The Arabs were under a chief called Abdel Kaber. In consequence of this defeat Marshall *Clausel* had been ordered to Algiers to resume the governorship and take command of the army.

The days of the Carlists in Spain appear to be drawing to a close, the Queen's troops and her allies were driving the rebel forces in every direction. The order of the Jesuits in Spain had been suppressed.

In *Holland* a violent outbreaking of the people had resulted in a series of mobs, the burning of a house and the rescue of some property distrained

for taxes. The cause of the riots was an unpopular tax law, which the government was compelled to abandon. The mob and cholera triumph all over the world.

LIVERPOOL COTTON MARKET—July 20.

The demand for cotton this week rather improved, the trade have purchased more freely, particularly of the better classes of American, for which holders have obtained very full prices. The business reported comprises 240 Sea Island at 22d to 89d with 120 stained at 12½ a 21d; 5860 Bowed at 9 5-8 to 12½; 5620 Orleans at 9½ to 13d; 2480 Mobile, Alabama, and Tennessee 9½ to 12½.

21st.—There has been very little business doing to-day, and the sales do not exceed 600 bales.

23rd.—Our market during the last few days has been very quiet, and not more than 2,500 bags have been sold, without change in American, while the few sales made in Brazil have been at a decline of ½d per lb.

The grain market had an upward tendency owing to the heavy rains last week, but the weather for the past few days having been extremely fine, all speculation has been checked. Tobacco is in steady request at previous prices.

LONDON MARKETS, July 21.

Turpentine—About 2000 b's. have arrived, and expected to be sold at about 12s.

Cotton—the cotton market remains in a languid state. The purchases since Friday last do not exceed 200 to 300 at former prices and heavy. The sales at Liverpool last week 16,000 bags, the prices of fine American higher, other descriptions lower.

Later from France.—The Cholera was spreading rapidly in the South of France and had proved very fatal at Toulon, Marseilles and Nice. The army of Don Carlos in Spain are suffering for want of provisions, and there was no money in the military chest. Letters from Vienna announced in positive terms, that the northern powers of Europe intend acknowledging Don Carlos; if this should be done, this may bring a war among the European powers sooner than we had any previous right to expect it, as it must bring those powers into collision with the parties to the quadruple treaty. The check received by the French troops near Algiers is confirmed; the exact loss 262 killed, 308 wounded. Marshal *Clausel* left Paris on the 22d July for Algiers.

HAVRE MARKET JULY, 26.—*Cotton.*—3 a 4 cts. *advance* has been obtained on the low and middling descriptions from the U. States. Sales 106 bales Louisiana at 128 a 177 a 195f a 171f 50c. 400 upland Mobile at 129 a 160. Rice, 280 tiers Carolina, obtained 26f 12½ cts.

CONTENTS OF THIS NUMBER.

Annunciation of the *Silk Manual*—Growing Rice on dry land—preservation of butts—notice of *Gama grass*—Winter wheat, with remarks by the editor of the *Farmer & Gardener* on time as the appropriate food for wheat crops—"Agricola" on the rice culture on dry land—Mr. Shannon on the *Gama grass*—Bradley's method of restoring decayed fruit trees by inarching—mowing and making hay—female faith—virtues of the tomato, and the method of making tomatoes catsup—mode of destroying chicken hawks—do. of crows—domestic summary—foreign abstract—prices current, &c.—Advertisements.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,	bushel.	2 50	—
CATTLE on the hoof,	100lbs	5 50	6 00
CORN, yellow,	bushel.	75	77
White,	"	75	78
COTTON, Virginia,	pound.	18½	—
North Carolina,	"	—	—
Upland,	"	18½	20
FEATHERS,	pound.	37	40
FLAXSEED,	bushel.	1 25	1 37½
FLOUR—KAL—Best wh. wh't fam	barrel.	7 25	7 75
Do. do. ba er's,	"	6 75	7 25
Do. do. Superfine,	"	6 12	6 37
Super Howard street, dull	"	6 00	—
" wagon price,	"	—	5 75
City Mills, extra,	"	—	6 12
Do.	"	—	6 00
Susquehannah,	"	—	5 87
Rye,	"	—	5 00
Kiln dried Meal, in hhds.	hhd.	19 00	—
do in bbls.	bbl.	4 00	4 25
GRASS SEEDS, red Clover,	bushel.	5 00	5 25
Timothy (herds of the north)	"	2 50	3 00
Orchard,	"	1 50	2 50
Tall meadow Oat,	"	2 00	2 50
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.	—	15 00
HEMP, country, de rotted,	pound.	6	7
" water rotted,	"	7	8
HOGS, on the hoof,	100lb.	6 75	7 00
Slaughtered,	"	—	—
HOPS—first sort,	pound.	12½	—
second,	"	10	—
refuse,	"	8	—
LINE,	bushel.	33	35
MUSTARD SEED, Domestic,	"	5 00	6 00
OATS,	"	35	38
PEAS, red eye,	bushel.	—	—
Black eye,	"	—	1 25
Lady,	"	—	—
PLASTER PARIS, in the stone,	ton.	—	3 50
Ground,	barrel.	1 25	—
PALMA CHRISTA BEAN,	bushel.	2 00	—
RAGS,	pound.	3	4
RYE,	bushel.	70	73
Susquehannah,	"	none	—
TOBACCO, crop, common,	100 lbs	4 50	5 00
" brown and red,	"	5 00	7 00
" fine red,	"	7 00	9 00
" wraperry, suitable	"	—	—
for segars,	"	5 00	10 00
" yellow and red,	"	8 00	12 00
" yellow,	"	9 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality, ..	"	4 00	—
" ground leaf,	"	5 00	8 00
Virginia,	"	5 00	10 00
Rappahannock,	"	—	—
Kentucky,	"	8 00	14 00
WHEAT, white,	bushel	1 25	1 30
Red,	"	1 15	1 22
WHISKEY, 1st pf in bbls. }	gallon.	33	—
" in hhds }	"	37	—
" wagon price,	"	33	33½
WAGON FREIGHTS, to Pittsburgh, ..	00 lbs	1 50	—
To Wheeling,	"	1 75	—
WOOL, Prime & Saxon Fleeces, ...	pound.	62 to 73	3 to 34
Full Merino,	"	52	62 30
Three fourths Merino,	"	47	52 28
One half do,	"	42	47 26
Common & one fourth Meri.	"	38	42 25
Pulled,	"	38	42 26

VALUABLE STOCK FOR SALE.

A FULL-BRED Durham short horn yearling FULL, a very superior animal; a 7-8 blood same age; also two COWS, 4 years old, 3-4 blood, in calf by a full-bred Full. Pedigrees given in full. Applications for any of the above cattle to be made to the Editor of the *Farmer and Gardener*, by whom the terms will be made known. Letters from a distance must be post paid. June 30th.

advantages, and emulate their neighbors in the praiseworthy work of rendering public good.

TIMOTHY IN MISSOURI.

We copy the annexed from the *Salt River Journal*, published at *Bowling Green, Missouri*, and are happy to find, that the good people of that country are beginning to turn their attention towards the cultivation of *grasses*. We say we are happy of it, and in so saying we but convey the feeling the information imparts to us; for we hold it that no system of husbandry can be good, which does not look to the culture of grass as its basis. Our readers will wonder at the immense height of the spires of the grass to which the article alludes:—6 feet, 3 inches is, indeed, a length for timothy, which exceeds any thing we ever heard of before, and we trust its luxuriant growth will spur on our friends in that quarter to pay especial attention to this department of a farmer's business. The recommendation of the editor to sow timothy and clover together, is judicious and proper, the two grasses combined making a food infinitely preferable to either singly:

GRASS.—“We have still further evidence of the adaptation of timothy to our soil. We made mention a few weeks since of spires of timothy brought to this office which measured five feet eleven inches—since that time another neighboring farmer has brought in several spires of the same kind of grass which measures six feet three inches.

Heretofore only a very few of our farmers have raised grass of any kind. Their principle food for their cattle and horses during the winter season has been corn. They are beginning however of late to turn their attention to the use of hay—finding that no country is better adapted to its growth.

Those who are beginning to raise Timothy and clover, we observe, sow them entirely separate—we would observe that it is a very common practice in grazing states to mix them. It is true that clover ripens some earlier than timothy, but if cut when in bloom, they make a much better hay, for horses in particular, than either do separately. Timothy has an astringent quality, which is entirely corrected by an admixture with clover.”

THE PASSION FLOWER.

We have received two numbers of a beautiful little periodical published in New York, bearing the above title. It is in 32mo form, printed with an elegant clear type, on fine paper, and very fancifully bound in red morocco, embroidered with gilt. It is issued monthly, each number containing two flowers, and ninety-six pages, with tint leaves for crayon sketches, or desultory thoughts. The mechanical arrangement and execution of this work, although eminently creditable, is its least recommendation; it has that

which is infinitely better calculated to commend it to the favor of intelligent and well educated readers—it bears on its pages those internal evidences of a sound judgment—a discriminating, well disciplined mind—of one capable of great grasp and power of thought—which are the sure marks of intrinsic merit and refined taste. The name, itself, led us to believe that it was the offspring of some highly gifted woman—of one inspired with genius, lofty, pure, restless, and chastened—of one whose bosom was the seat of literary chivalry—whose mind propelled her onward in pursuit of generous adventure—and we were not disappointed—it is the production of Miss Anna Johnson Reid, daughter of Capt. Samuel C. Reid, who commanded the private armed brig *General Armstrong*, of New York, during the late war, a lady eminently qualified by her talents, ambition, and literary acquirements, to conduct such a work. Though unpretending in size, the *Passion Flower* combines in its tiny pages much to improve, instruct and delight. The subjects are judiciously selected, treated in excellent style, and well adapted to allure the votaries of learning, the admirers of wit, and the lovers of virtue, to the rich intellectual banquets provided for them. We know not whether we are most influenced in our partiality, by our respect for the talents and attainments of the fair authoress, or for the noble daring of her brave and intrepid father: but let whichever feeling predominate that may, we know this—we sincerely wish her a liberal support. The work is one of decided merit, and we trust that pride of sex will induce the ladies to step forth and lend it their kindest patronage, so that the lovely namesake of one of the most interesting ornaments of the *parterre* and the *garden*, may adorn every parlor, and be the chosen companion of the *boudoir*: thus will the *sanctum sanctorum* of female peace and quiet, instead of being, as of old, the closet where my *lady-love* pouted and sulked away the acidities of the breakfast table, be converted into a study, where mind may commune with mind, with all the unaffected ingenuousness characteristic of the female heart.

We feel that we need not bespeak for it the support of American gentlemen, for patriotism respect for native abilities, admiration of female excellence, and pride of national fame, all conspire to commend the accomplished daughter of the *hero of Fayal*, to their best regards. Those of them who love their country and glory in the achievements of its sons, will feel it a distinction which carries a generous glow to the heart, to be enabled in the same act, of testifying their grati-

tude to an intrepid commander, and of paying a just homage of respect to his amiable daughter, whose aspirations for fame are thrice hallowed by the gentle, unsullied spirit, and elevated sentiment, that grace her writings. We say we need not bespeak their support, for they will be prompt in sustaining a publication edited by a countrywoman, in whose veins run the blood of as ardent a patriot and gallant a tar, as ever periled life in defence of

That “glorious flag of stripes and stars,
Which “no rapine stains—no treason mars.”

PROPOSED CATTLE FAIR.

Having been solicited to hold a CATTLE FAIR for the sale of superior animals of the various IMPROVED IMPORTED, and other breeds, we take this occasion to notify all owners of any of the following kinds of stock, that if sufficient encouragement offer, we shall on the day following the termination of the *Central Course Races*, this fall, hold the same. All owners of such stock in this, and the adjoining states, who may be disposed to send the same to our fair, will communicate with us by letter, in time for their letters to reach us by the 19th instant, it being our desire to publish our prospectus on the 22d, should sufficient encouragement offer.

We desire to embrace within the range of animals to be sent:

IMPROVED DURHAM Short Horns:—full blooded, and grades.

DEVONS, full blooded, and grades.

Superior oxen, well broken, whether of improved imported, or native kinds.

Superior milch cows of native stock.

SHEEP—Improved Bakewell,
Saxons,
South Down,
Merinoes,
Dishleys.

and their respective grades.

In every instance, where the stock to be sent, are of the imported full bloods or of their respective grades, certificates of pedigree, well authenticated, must be sent, as it is our wish to make our FAIR a mart where the agriculturists of our country may resort with a certainty of getting a genuine article—just such an animals as they may believe they are buying. We shall publish a full prospectus in our next number, and in the meantime we request such gentlemen as may have any of the above articles to dispose of, to address us by letter in time for their communications to reach us by the 19th instant.

Arrogance is a weed that grows mostly on a dunghill.

RICE BREAD—ON CORN MIXED WITH OTHER CROPS.

[From the Farmers' Register.]

Discovering from your letter of the 15th February, that cultivating rice on dry land was new to you, I have thought that one of the ways in which we use it, may be so equally. This mode of preparing it, grows with us out of the circumstance of raising it ourselves, with much ease, and having it in plenty. This grain is made to add to our bread stuffs, and is found a most superior addition. It is sent to the mill in its rough state, ground as wheat, and bolted, or returned to be passed, as corn meal, through the fine sieve. The flour is put through the usual process of making wheat bread, and made into loaves, in the form of what is termed "*family bread*." When baked, it is as light and spongy as a fine muffin—and when accompanied by good butter, cannot be surpassed, in my opinion, by any preparation of the bread kind. Like the corn, it requires to be used in a warm state. When cold, it becomes unfit for use totally. But here again, domestic economy has contrived a valuable appropriation of what becomes cold, or is left after meals.—Thrown into a pot with clean water the next day, it dissolves as soon as the water arrives at the boiling point, and if a fat fowl is added, makes, with the usual additional items, a superb soup.—The absolutely necessary point in the fabrication of this is to have it light. This the Indians effect, who make it well, by making up the bread, or dough, entirely with hot water, in which the grits, as they call it, have been steeped, and which appears to act as an yeast in producing lightness. I have frequently used the hop yeast with equal success, although I prefer the Indian mode. As a breakfast preparation, this bread with good butter, if the first is well made, may fairly be termed a luxury. The first time I saw it, its excellence surprised me, exhibiting a preparation to me entirely new, and unthought of—at the same time prepared with so much ease. The loaf may be made large. That a change of bread, as well as other articles of diet, is essential in preserving a healthy action and tone of the digestive organs, I believe is well determined; consequently, rice bread, which must evidently be one of the most salutary, may fairly be enlisted in the number.

A sheaf of this grain submitted to the cutting box, and sprinkled with a small quantity of rye or Indian corn meal, is thought by our best horse masters to have a happy effect on the stomach of that useful animal—given at least weekly.

If my mode of cultivating land is the productive one, it will be discovered readily that the manner in which I save my corn crop is what secures it, as but for the adoption of that plan, it would be out of the question. If to produce the greatest result possible, from any given quantity of land, and labor bestowed on it, is the course that a judicious cultivation of land would demand, and that it is, I believe may be termed a self-evident proposition, then the mode of cultivating land which I suggest, must be the correct one. Is it not making the "two stalks stand where but one stood before?" But still it must be observed, that the manuring plan comes in for a full share. Then the wisdom of that plan is equally self-evident, as but for it also, the result could not be ob-

tained. But give the manure, and cut down and remove the corn when at maturity, and the result is certain.

The remarks of that distinguished cultivator Judge Buel, on this subject, in his excellent paper on the cultivation of the corn crop, must be familiar to reading agriculturists. There, it will be recollected, the Judge contends against any loss in the corn by this mode of saving the crop. So do I—and so will all who fairly and judiciously try it. But if there should be a little shrinkage in the corn, there is none in the potatoes—the rice—the peas, and the pindars, [ground peas.] I ween two hundred bushels per acre of those valuable productions, will amply settle the shrinkage account, as also fairly and fully close that opened for "trouble." Nor will it be deemed, I hope, a small item in the adjustment of "profit and loss," that my land is well shaded by valuable ameliorating crops, during that part of the season when the burning rays of the sun acts so powerfully on land. The success of corn after rice, on upland, with us, is proverbial—especially if the stubble is turned well under. The effect of the potato, the pea, and the pindar on land, is well known, as improvers of soil. To those who are disposed to enter into the calculation, and adjust the account fairly, I will remark, that the manuring I give, preparatory to this "heavy crop," is an insurance for three more, or rather *five more in three years*—my rotation being, &c. cotton, rye, and peas, on the stubble ploughed in, oats and peas on its stubble, followed by grass one year—no pasturing.—The grass year is intended as a year of perfect rest to the land.

But to form a correct estimate of the value of my plan of saving the corn crop in addition to what has been already stated, I must beg leave to refer you to an accompanying paper on saving corn-stalks and converting them into a superior food, where it will be seen that I derive from my corn crop, a most valuable resource for raising cattle, and that the plan I have adopted for saving my corn gives me all the "refuse" of the corn in that state in which it yields the greatest possible quantity of nutriment, consistent with making the grain—and that this refuse part amounts to a prodigious mass to the acre—as also the pea crop in the manner in which I cure and preserve the vines—as also the vines of the potato crop, and pindars.

You will readily conceive that my corn field after the whole production is housed, enables me to support amply, a large stock. A principal feature in my theory is, to maintain and keep every hoof that I can support well, and of course to turn to the account of forage, every thing that can be made to go it. With me the key stone to the arch is, *manure*—but the year after I manure, I never fail to lime—the last slaked. I am aware the question will be asked, what do I litter with? To this I will say, leaves and weeds—and I litter well. My cattle lie dry and warm in winter—in summer dry and cool, on beds of leaves and weeds, and my fence rows are kept clean. Every thing that can be eaten by my stock is eaten, because it is prepared for that purpose: and my stock in return, gives that which prepares the leaves and weeds for giving to the soil additional productive

powers, and secures the heavy crop, and ample remuneration for the labor bestowed.

AGRICOLA.

Alabama, March 25th, 1835.

SAVING CLOVER SEED.

The two great objects to be attended to, in raising clover seed with profit, are—First, to secure the production of as large a crop to the acre as practicable—and Secondly, to harvest the crop in such a manner, as to bring as large a portion of the seed into the barn and to leave as small a portion of it as possible in the field.

To attain the first object, that of securing a large product, we have in our preceding numbers, in observations on culture of clover, given the necessary directions; we will now only repeat, that the main things to be attended to are the following—1st. That the land be fertile.—2d. That it be well prepared before sowing the seed, as heretofore directed.—3d. That a sufficient quantity of seed be sown to the acre.—4th. That it be evenly distributed over the ground.—5th. That, whenever the land requires its aid, gypsum or plaster be sown on the clover—and 6th. That it be not injured by injudicious or excessive grazing. If these particulars be well attended to, an acre of ordinary land will produce three bushels of seed in a common season, often more.

We come now to speak of the more difficult and laborious operation of safely and economically harvesting and securing it. This requires care and attention. The great objects to be aimed at are, to cut the seed at the period when there is the largest portion of ripe seed on the ground, in that stage of maturity, which will admit of its being collected into the barn, and so to handle it, as to prevent the seed from being shattered off and left on the field, while the straw or haulm only is collected in the barn. It is, we believe, to the improvident and ruinous neglect of strict attention to these two latter objects, that most farmers may attribute their failure in making clover seed. We will lay before our readers the results of our own observation and experience, on these important points, hoping that those of our patrons, who may have discovered a better mode of effecting these objects, than the one recommended, will yet communicate to us their practice in time to enable us to lay it before the public in our next number.

TIME OF CUTTING.

As the clover seed, from the time the first heads ripen, until the close of the season, are daily arriving at maturity the great desideratum is, to ascertain the precise period when there is on the ground the greatest portion of ripe seed, in a state which will admit of its being collected and brought into the barn. If the clover be cut before this period, there must evidently be a loss sustained from the immaturity of too large a portion of the seed. If the cutting be deferred beyond this period, an equal, and perhaps a greater loss will be sustained, from the impossibility of saving the seed first ripened, generally the best, on account of its being so easily shattered off. We would recommend, as the most eligible time for cutting, the period when about two-thirds of the heads have become ripe and assumed a black color, many of the others, at this time of a brown color, will ripen after cutting

MODE OF CUTTING.

Where the clover has not lodged, and is high enough to admit of it, by far the most expeditious, and in every point of view the most eligible mode of cutting, is to cradle it as we do grain, only throwing it into double swarths, that is, laying the clover cut from two lands in one swarth. If the grass be so short as to require it, a strip of linen may be fastened on the fingers of the cradle so as to prevent the heads falling through them.

MODE OF CURING.

If the crop be not heavy and the weather be good, the swarths may lie undisturbed for several days, until the hay be perfectly cured; it should then, in the morning or evening while sufficiently moist from the dew, to prevent its shattering off too easily, be gently raked into small bunches, such as can be conveniently raised with a fork and laid on the wagon. When not too damp, these bunches should be hauled to the barn, and either stowed away in mows, or, which is best, thrashed off, and either immediately cleaned, or else the heads stowed away in a room prepared for the purpose until winter, to be then thrashed or trodden out. But should there be rain, on them, or should they be suffered to remain in the field any considerable length of time after being raked up, these bunches must with a fork be gently turned bottom upwards, and laid in a new place, after every rain to which they may be exposed, and after every two or three days they may have lain in the field in fair weather. This is necessary to prevent the seed from being injured by the heat and moisture to which they will have been exposed, from the sun, the rain, and the moisture of the earth. After being sufficiently cured, while dry, let the seed be gently laid on the wagon or sled, and hauled to the barn, using every necessary precaution to ensure, that as little of it as possible be left in the field or scattered along the road.

MODE OF CLEANING.

Various methods are practiced, for cleaning the seed from the chaff. The only two as far as we know, used in this country, are treading it out with horses, or cleaning it in a thrashing machine: The first is tedious, laborious, filthy and unwholesome both to man and beast, the latter is far preferable in every respect, but as all are not provided with thrashing machines and as therefore many must still continue to tread out their seed, we will submit a few observations on the mode of performing this operation. Having covered the barn floor with seed in the chaff to the depth of from 12 to 18 inches, put on the horses and tread one day, the next morning run the chaff through a fan, much of it will have been beaten to dust and will be blown away, as will also the light chaff, having no seed, and that from which the seed has been separated, but much the larger portion of the seed, still enveloped in the chaff, will be found in the rear of the fan, this having been separated from the empty chaff adjoining it, must be again spread on the floor and having added another portion of untrodden chaff, the horses must be again put on and made to tread it another day, when it should be again run through the fan as before; the produce of this, will far exceed that of the first day's treading, but still, much good seed will be found immediately in the rear

of the fan not yet separated from the chaff—this must be again spread on the floor, and a new addition be made of untrodden chaff, and this process must be repeated until the whole crop is trodden out. The seed, after passing through the fan, should first be run through a sieve, sufficiently coarse to permit the clover seed to pass through a finer sieve, retaining the clover seed, but permitting the passage through of all smaller substances; by these two processes, the clover seed will be thoroughly cleansed from all kinds of filth and prepared for market. The only advantages derived from cleaning the seed rather than sowing it in the chaff are the ascertaining with greater certainty the quantity sown and the ensuring a more equal distribution of the seed—where, therefore, a sufficient quantity can be afforded to ensure the desired thickness in every part of the ground, sowing in the chaff, will not only do as well, but it is to be preferred, as it is believed more likely to come up and to stand.

In reply to our correspondent's 3d query, as to the time of ploughing under clover for wheat—we would recommend that it be done so soon as a considerable portion of the seed has become ripe—the wheat should then be sown and well harrowed in, but the land should by no means be again ploughed, until the wheat has been taken off.

As to briars and sedge grass, we refer our subscriber to what we have said in former numbers, and in the present—the sedge grass, he will find easily subdued, if the ground be ploughed and harrowed in the winter; pasturing and deep ploughing are the only effectual modes we have tried for extirpating briars and sprouts; we have much confidence however in the efficacy of the mode described in the receipt published in this number.

Harmon's thrashing machine will thrash out, if properly attended to, from 5 to 10 bushels of clover seed, and from 150 to 200 bushels of wheat per day. This machine will cost about fifty dollars, exclusive of the house and mill-wright's work; this is the only machine for cleaning clover seed used in this part of the country—of which we are apprized; we have used it for two years past with great advantage, especially in cleaning clover seed.—[*Tennessee Farmer*.]

HARVESTING OF CORN—BY W. G.

[From the *Genesee Farmer*.]

Mr. Editor—Some of my opinions respecting the best and most profitable mode of harvesting a crop of corn, were considerably shaken by the communications which appeared in the last volume of the *Farmer* on this subject, from men whose testimony is of the greatest weight; my impression has been, that to secure the greatest quantity of good sound corn it was best, as soon as the tops had become somewhat dry, and the ears hard glazed, to top the corn, and let the ears stand on the stalks till the time of gathering, and such of course has generally been my practice. I did this, because I believed that after the top had performed its office of fecundating the plant, it became in a manner useless; and that stalks dry, and leaves withered, however excellent as a fodder for cattle, could do little or nothing towards elaborating the juices necessary for the perfection

of the ears. It besides appeared to me that the fresh and green husks which farmers know retain their power of elaborating sap much longer in general than the leaves, were designed by nature to supply the ears with food; and though opposed to the mutilation of plants generally, as the means of increasing their productiveness, topping corn I did not consider as an operation of that kind. When such men, however, as Buel and Colman, maintain a different theory, and backed by experiment, contend that topping corn is hurtful, it certainly becomes minor agriculturists to pause, and test the question thoroughly. These farmers, and others assert, that topping corn is decidedly injurious—that it materially lessens the actual weight of the crop—and, therefore, that allowing the stalk to remain whole till the time of gathering, or else cutting it up close to the bottom, is the preferable mode of harvesting.

These experiments, though so far as they were detailed, they appeared to be very fairly conducted, were not altogether satisfactory to me, as they did not go far enough. Every farmer is sensible, that corn topped becomes more thoroughly dried by exposure to the direct rays of the sun, and must therefore be expected to weigh less at the time of gathering than corn shaded by the tops, or cut up by the bottom and standing in stacks till husked. My corn the past year had been cut up by the bottom, with the exception of a few pieces of rows, before the thought of making any experiments myself on the subject occurred. In order to see, however, whether my ideas of the different rate of shrinkage between topped corn, and that cut up, were correct, I carefully weighed a basket full of ears of each kind, at the time of gathering, and placing them in a dry chamber, where they lay undisturbed, let them remain until the middle of January, when I had both kinds carefully shelled and weighed. By this experiment, it appeared that the corn cut up by the bottom shrunk three pounds in a bushel more than the topped; but this did not mark the extent of the difference, as at the time of shelling, the former was easily distinguished from the latter by its comparative dampness, though both parcels were bright, fine corn. I cannot, therefore, consider the question as entirely put at rest by any experiments that have yet been made, but as the matter is certainly one of importance, I hope that another season will not pass without its being done effectually. In order to do this, all the specimens must not only be weighed and measured at the time of gathering and at the time of shelling, but be suffered to remain in some position favorable to the evaporation of all dampness until the corn is complete and thoroughly dried, when a careful comparison of the whole would show the true result.

ALTERNATING CROPS.—The present season has afforded a good opportunity of testing the utility of alternating tillage and grass crops: For so far as our observation has extended, meadows of similar quality or soil have been productive in an inverse ratio to their age, i. e. the longer they have been in grass, the lighter the product. In some instances the difference has been three to one in favor of the new stocked lands. The more than common difference apparent the pres-

ent year, we ascribe to the want of heavy rains, in the last autumn, winter and spring. The light rains penetrated more readily grounds which had recently been under the plough, and which were comparatively porous and pulverent, than they did those which were rendered in a manner impervious, and which had remained for years undisturbed by the plough. But if grass greatly deteriorates, grains do much more so, without heavy dressings of manure, and the alternation of roots.—Tillage is admirably fitted to pulverize, clean and prepare the soil for grasses; and grass lays are equally beneficial to tillage crops, by the vegetable matter—the food—which they give to the soil. We always suspect that the man who advertises his farm, as “suitably divided into plough, meadow, and pasture land,” pursues the old platform system, and that he knows nothing of the immense advantages, particularly upon sands, and gravels, and loams, which result from a judicious system of alternate husbandry. We do not wonder that such a farmer, now a-days, should be obliged to sell his farm. Pastures as well as tillage and grass crops, are augmented in value by the alternating system. There are districts which form an exception to the rule; but generally, every acre of a farm, which is not a rock, may, by thorough drainage, be rendered capable of yielding grain, grass or pasture: and the interest of the cultivator would be promoted by subjecting them to this alternation.—[*Cultivator*.

DISCOVERY OF A BED OF THE CARBONATE OF LIME.

The “*Crawford Messenger*,” published at Meadville, Pennsylvania, has the following notice:

About eleven miles north-west of this place, (3 or 4 miles north of Brightstown, in this county), an inexhaustible bed of *carbonate of lime*, in a clayey state, (*calcareous marl*), has been discovered. The clay, when burned after the usual manner, produces very good white lime; from the specimen we have seen we would say the *very best lime*. It has been found that at this one place, it covers an extent of one hundred acres, which is prairie land covered with turf to the depth of one foot, under which the marl is found, and although it has been dug to the depth of nine feet, yet no sign of other kind of earth was discovered. Apart from the general uses to which lime is applied, we are sensible that this discovery will effect a new era in the *agriculture* of this section of country, and will, when its uses as a fertilizing manure become extensively known and applied, enhance the value of our lands twofold. We hope this discovery will excite such a spirit of inquiry and research as will result in the disclosure of beds of lime in every part of the country; and that persons may be disposed to seek for it from an acquaintance with its nature and uses, and be able to distinguish it from other earths, we shall in some future number devote a column in explanation of its chemical properties, probable localities, and value as a manure. We have no idea that it is confined to any particular spot, but from many circumstances, are firmly of the opinion that it will be found near the surface in almost every section of the country.

Avoid that which you blame in others.

THE BARNITZ HOGS.

That gentleman at a distance may be made fully acquainted with the character and qualities of the *Barnitz* pigs advertised in our sixteenth number, by Robert Sinclair, of Clairmont Nursery, we subjoin the following extract from a communication which originally appeared in the *American Farmer*, from the *Hon. Charles A. Barnitz*, late a member of Congress from the York district in Pennsylvania. The whole communication is replete with interest, and we recommend his method of keeping his hogs to the attentive consideration of agriculturists generally; compared with the plan followed by many, of turning their hogs into the road or woods, where they have to shift eight months in the year for themselves, it is indeed, as “hyperion to a satyr.” Humanity would teach us that every beast of the field subjected to the dominion of man, has a claim upon him for kind treatment, and an enlightened economy is equally instructive, in demonstrating that profit cannot enure from the raising of any animal which is badly kept. A pig thus fed from the moment it is weaned, until put into the pen for fattening, cannot reasonably be expected to be otherwise than stunted in its growth; and we think we might assume that, if two pigs of the same litter were taken, the one to be left to be its own caterer amidst the *luxuries* of the road, or the *rural* scenery of the forest, and the other to be well fed with wholesome and nutritious food, that the latter would exceed the former in weight, from fifty to sixty per cent., so that there would be a saving of that amount of corn when they come to be fattened for slaughtering, as one half, or, perhaps, less hogs, in number, would answer the purposes of the farm. When we talk of the pigs and hogs being well fed, we have not the most distant idea of that species of feeding which some adopt, and which partakes more of the quality of *stuffing* than any thing else; we mean a generous diet, without profusion, such as is provided by Mr. Barnitz for his hogs, which, without inducing grossness will keep the animals in a healthful growing state.

CHESTER BREED OF HOGS.

In one of your late papers, you noticed in terms of commendation the breed of hogs which I have kept upon my farm; and I now offer to you a brief account of their origin and peculiar properties of value. In the valleys of Pennsylvania, the farmers generally have distilleries, and their stock of hogs is obtained from the western drovers, who collect them as they can get them.—The distillery affords abundance of food, and the good and bad, when moderately fat, are sold in a mixed lot for the city markets, without much regard to quality, or any discrimination as to the separate values of the animals.

Chester county seems to form an exception; there are few distilleries there; and the farmers, to turn their means to the greatest advantage, have shown a laudable attention to their farm stocks. The breed of hogs, especially, which is preserved with great care, has a celebrity throughout the State. I have not been able to learn their origin; but incline to the opinion that they are a cross from the Chinese, with the English white Suffolk breed, of which some were imported into Philadelphia county many years since. They are white in color; of fine form, easily fattened, and of early maturity: at one year, without extra keep, they often weigh three hundred.

I have no distillery; my mode of feeding, is—the first winter I feed on boiled potatoes and pumpkins, with linseed oil meal occasionally; in the summer, keep them on the clover field, say from May to November; those intended for fattening, are then put up for four or five weeks, and fed upon corn; five bushels to each in the ear (but better if ground) will bring them to full condition for killing.

I have a cheap and useful boiling apparatus, the whole cost being not more than eight dollars; it is simply a cast iron kettle, containing a barrel, put up like a hatter's kettle, with a small fire place below, and flues running up behind; a sheet iron lid covers the top, and a rough board shed is fixed about it to keep off the wind and rain. A boy in two hours may thus boil several barrels of pumpkins and refuse potatoes or turnips, and the slop keeps moderately warm during two or three days, even in winter; a sprinkling of salt is necessary, and a few handfuls of corn meal will richly improve the mass. A piece of rotten wood, or a shovel of coals from the bake oven-pit, occasionally thrown into the pens, is necessary as a luxury, and I suppose a useful absorbent.

The praises of the *poor man's cow* we often hear, but the poor man's pig I deem of really greater value. The cow, it is true, yields his family a luxury during nine months in the year, but at an expense of not less than twenty-five dollars. A pair of pigs, of a good breed, the cost of which with keep and fattening will not exceed fifteen dollars, furnishes his family with five hundred pounds of meat, sufficient for his year's consumption.

Among the agricultural improvements of the day, some attention has been excited to the breed of hogs, and the mischievous notion long prevailing, that *feed makes the breed*, is going by. A valuable article was published some time ago in your paper on this subject, from the pen of your late lamented correspondent, Mr. Meade, containing many excellent hints. The loss of this useful citizen to the agricultural community, would seem to make it incumbent upon others, to contribute occasional suggestions, which their practice or information may furnish, to further our common cause; and in the hope that the example may draw upon the leisure hours of some to follow me, I have extended my sketch to a more tedious detail than I at first intended.

C. A. BARNITZ.

Springdale, York, Pa.

GAPES IN CHICKENS.—On the subject of the disease of chickens called the gapes, a writer remarks: “On the dissection of chickens dying of

this disease, it will be found, that the trachia (or wind pipe) contains numerous small worms, about half an inch in length, and the size of a small cambric needle; on the first glance, they would likely be mistaken for blood vessels. These worms may be dislodged and the disease cured by the introduction of tobacco smoke into the mouth, until the chicken becomes insensible, in this state it will remain for one or two minutes. The operation may be repeated at pleasure, without endangering the life. The first application will usually produce the death or expulsion of the worms, and the removal of the affection—the second always.

MISCELLANEOUS.

THE SILK WORM.

There is no form upon our earth,
That bears the mighty Maker's seal,
But has some charm—to draw this forth,
We need but hearts to feel.

I saw a fair young girl—her face
Was sweet as dream of cherish'd friend—
Just at the age when childhood's grace
And maiden softness blend.

A silk worm in her hand she laid,
Nor fear, nor yet disgust was stirred;
But gaily with her charge she play'd
As 'twere a nestling bird.

She raised it to her dimpled cheek,
And let it rest and revel there—
O, why for outward beauty seek!
Love makes its favorite fair.

That worm—I should have shrunk, in truth,
To feel the reptile o'er me move,
But loved by innocence and youth,
I deemed it worthy love.

Would it, I thought, the soul imbue,
In early life, with sympathies
For every harmless thing, and view
Such creatures formed to please.

And when with usefulness combined,
Give them our love and gentle care—
O, we might have a world as kind
As God has made it fair! *Ladies' Magazine.*

LORD BYRON'S DOG AND BUTLER.

Lord Byron's principal favorites in his household were his Newfoundland dog, Boatswain, and his butler Joe Murray. The dog, however, stood first in his master's affections, and was, if we may believe the epitaph placed on his monument, his only friend. That famous epitaph runs thus:

"To mark a friend's remains these bones arise.
I never knew but one and here he lies."

Never was a dog so honored. But Joe Murray almost rivalled Boatswain in the esteem of his master, and (says Washington Irving in his late work,) when Byron built the monumental tomb which stands in the Abbey garden, he intended it for himself, Joe Murray and his dog.—The two latter were to lie on each side of him. Boatswain died not long afterwards, and was regularly interred, and the well known epitaph, inscribed on the monument. Lord Byron departed for Greece. During his absence a gentleman to whom Joe Murray was showing the tomb, observed, "Well, old boy, you will take your place here some twenty years hence."

"I don't know that sir," growled Joe in reply; "if I was sure his lordship would come here, I should like it well enough, but I should not like to be alone with the dog."

A YANKEE BLACKSMITH.

Professor Henry, of Princeton, it is known has made some important discoveries on electro-magnetism, and has produced a magnet to lift 2,500 lbs.; it being, however, still a desideratum how to control this enormous power, so as to apply it to practical use. By the subjoined note from Professor Eaton, of Troy, this desideratum, it appears, has been attained by a New England Blacksmith.

An obscure blacksmith of Brandon, Vermont, 11 miles south of Middlebury College, happened accidentally to become acquainted with Professor Henry's discoveries in Electro-Magnetism. Possessing one of those minds, which cannot be confined to the limits of a blacksmith shop—nor any shop less than the canopy of heaven—he applied this power to the astonishment of scientific mechanics. He turns three horizontal wheels around 50 times per second with this power. The wheels and shaft weigh 11 lbs. He has convinced Professors Henry and Bache, that the power is sufficient for strong machinery. A detailed account of it will appear in the next number of Silliman's Journal. The Hon. Stephen Van Rensselaer has purchased his first constructed machine (or model) for the Rensselaer Institute in Troy, as a piece of apparatus. No chemical nor philosophical apparatus, can hereafter be considered perfect without it. Whatever may be its fate in Mechanics, it will cause the name of Thomas Davenport, (the inventor,) to accompany that of Professor Henry to the ends of the earth.

Professor Bache, of Philadelphia, and Professor Turner, of Middlebury, Vermont, have given opinions in writing, that Mr. D's application of Professor Henry's discoveries may be made to move heavy machinery for useful purposes. According to their views, another Livingston might make another Fulton, of the Brandon Blacksmith.

DOMESTIC HAPPINESS.—Who has ever travelled in the country, and has not looked with ecstasy upon the romantic and varied scenery there presented; has not witnessed in the course of his travels, the delight and happiness which cluster around the humble fireside of frugal farmers? You may "pause amid the wrecks of time," and the monuments of by-gone days—view with astonishment and surprise the splendid and massive specimens which mark the snow-cap summits of Mimmelah—pierce the interminable beds of ice that cluster round the poles—bask in an Italian sun or revel in all the sweets of a torrid or a more temperate zone. These may carry a momentary thrill of joy to the soul, but compare them to the bliss and happiness that are included in the hut of the honest cottager, and they are annihilated like mist before the sun. O, it is sweet to the laborer after the fatigues of the day are past, and night throws her sable veil over nature, to partake of his homely fare in the presence of his wife and children whom he loves, and in the bosom of that hallowed circle, "to teach the young idea how to shoot," and to watch the buddings of the infantile mind! it is more sweet than to repose in beds of down and to revel in luxuries torn from the bosom of innocence, and extorted from the widow and the orphan. It is in contemplating such a scene, that the mind finds itself constrained to say, "that if perfect happiness dwells in the sub-lunary regions, this must be its abode and seat."

SADNESS.—There is a mysterious feeling that frequently passes like a cloud over the spirit. It comes upon the soul in the busy bustle of life, in the social circle, in the calm and silent retreat of solitude. Its power is alike supreme over the weak and iron-hearted. At one time it is caused by the flitting of a single thought across the mind. Again a sound will come booming across the ocean of memory, gloomy and solemn as the death knell, overshadowing all the bright hopes and sunny feelings of the heart. Who can describe it, and yet who has not felt its bewildering influence? Still, it is a delicious sort of sorrow; and, like a cloud dimming the sunshine of the river, although casting a momentary shade of gloom, it enhances the beauty of returning brightness.

NEW AND IMPORTANT DISCOVERY.

A short time since, Mr. Montague, of Havre-straw, or some person connected with his family, in passing over a rough portion of his farm, broke off accidentally from the edge of a projecting rock, a piece about a foot square, which he observed was somewhat different in appearance from the ordinary stone, and his curiosity being somewhat excited, he was induced to carry it home with him, and subsequently to submit it to the inspection of a stone cutter; to the great surprise of all and the especial gratification and joy of the owner of the property on which it was found, it turned out to be a rare and beautiful specimen of the Verd Antique Marble, admitting of a beautiful polish, as we can testify from a specimen which we saw on Saturday morning. Its strongest caste is green, beautifully variegated with blue, purple and white veins, the colours very brilliant. Since the above piece was found, a careful examination of the rock from which it was broken has satisfied all concerned that it extends through a high hill, and is likely to be inexhaustible. This discovery cannot fail to be highly advantageous to this city, as the quarry is situated but two miles from the North River, and thirty miles from New York. We understand that Mr. Montague has refused *fifty thousand dollars* for the quarry in its present state! What is not a little remarkable about this discovery is, that it was not made before, the property had been in the family nearly 200 years, and this valuable property all this time lying useless within a quarter of a mile of the dwelling house!—*N. York paper.*

RECIPES IN PRESERVING, &c.

Damson Cheese.—Boil the fruit in a sufficient quantity of water to cover it; strain the pulp through a very coarse sieve; to each pound add 4 oz. of sugar. Boil it till it begins to candy on the sides, then pour it into tin moulds. Other kinds of plums may be treated in the same way, as also several kinds of cherries.

To preserve Grapes.—Take close bunches whether white or red, not too ripe, and lay them in a jar. Put to them a quarter of a pound of sugar candy, and fill the jar with common brandy. Tie them up close with a bladder, and set them in a dry place.

TOMATOES—how to preserve them.—Take good ripe tomatoes—peel them and preserve them as you would peaches, with good brown, Havana,

or loaf sugar. If not peeled they burst and do not retain that consistence desired by housekeepers.

TO MAKE YANKEE BREAD.—Take two measures of Indian and one of rye meal, mix with milk or water, to the consistency of stiff hasty pudding, and add yeast—bake in iron pans or iron kettles four or five hours. Eat with fresh butter or other food, and if while warm the better. Yankee bread is very good or very bad, according to the manner in which it is made. We commend it to dyspeptics. The Indian meal should be neither bolted or sifted.

RHUBARB PIES.—Gather a bundle of the leaf-stocks, *quantum sufficit*—cut off the leaf and peel the stock of the thin epidermis—cut in quarter inch pieces, and lay them into the crust—cover well with sugar, and add nutmeg, orange-peel and spice to taste. The flavor is equal, and many deem it preferable to gooseberries. The pie-plant is perennial, herbaceous and very hardy. A dozen plants will afford a family a constant supply.

METHOD OF DESTROYING MOLES.

Put brimstone, rosin and turpentine into a jug with a narrow neck, then stuff the jug with tow or flax, set fire to it, place the mouth of the jug into their hole, and they will soon be stifled.

OR

Make a paste with hellebore roots, wheat flour and beaten glass, scatter it in or near their holes, when they will eat it and receive their quietus.

In England where the mole is very troublesome, dogs are taught to catch them. The mode of instruction is simple. The dog must be permitted to accompany you when you are in search of them. When you catch one, rub it gently over the dog's nose so as to make him familiar with the smell: bob it at his mouth several times, and then lay it down and let him mouth it. By this means he becomes pleased with the sport, and of his own accord will ferret them out, and ultimately destroy and drive them away. In England the *cur* dog is used; the terrier we think would be found to be infinitely preferable.

DOMESTIC SUMMARY.

From the general order of General M'Dowell, of the Ohio Militia, we regret to perceive that that state is marshalling a force to "repair to the northern frontier to defend the citizens and sustain the laws of Ohio." We still indulge in the fond hope, that, as the *Percy* of the North West has been shorn of his honors, no step will be taken to jeopard the peace of the country. Upwards of half a million of dollars were received as the proceeds of the recent land sales at Chicago, and it is supposed that the entire sales the present year, in Illinois, will exceed three millions of dollars.

FOREIGN ABSTRACT.

Advices from Liverpool of the 25th July. The debate in the House of Commons on the Irish Church question was closed at half past three o'clock on the morning of the 24th, and Mr. Peel's amendment was lost by a majority of 37.

Lord John Russell gave notice on the part of Ministers that he should bring in a bill on the subject of tithes in England at the next session. The interference of the northern powers in favor of

Don Carlos, is still spoken of. He was still retreating. The cholera is yet in France.

HAVRE MARKET, July 23.—We have an improvement of 1f on pots, 63 brls having been sold at 40f, no pearls. Cotton, 3a 4c. advance has been obtained on the low and middling descriptions from the U. States. Sales 1063 bales Louisiana at 135f a 50; 1400 Upland, Mobile, &c. at 129 a 160; stock, 66,861 bales. Hops much neglected, a small lot of American sold at 1f per ½ ko. Indigo, scarcely any thing doing. Quercitron, stationary.

Rice—280 tcs. Carolina obtained 26f 12½. Whalebone—sale 3½ tons at 1f 60; 250 tons Carthagenia fustic, sold at 5f 87, free. Exchange—On London, 1mo 25f 47½, Mexican dollars 5f 30, each.

Sales, 23d—265 bales Louisiana cotton at 128fa 177f 50 100 cases Bengal Indigo at 8f 5 a 25.

Later News.—Advices from Liverpool to the 29th July have been received. The British municipal corporations bill has passed the House of Commons; but the Irish Church bill was still under discussion in that body. A committee of the House of Commons has recommended a grant of £16,000 to Mr. Guernsey for his improvements in steam carriages. The committee of the house had also adopted the bill to abolish imprisonment for debt.

The wheat and hay crops were promising and expected to be abundant. The distress in Ireland was unabated and without the prospect of relief.

In France the trials of the Lyons rebels had not all been completed, but those condemned were to be pardoned and those untried to be discharged. There were 80 deaths by cholera on 23d July at Marseilles.

The belief was that the Northern powers would not now do any thing for Don Carlos, and it is said that the Emperor of Austria manifests a disposition to recede from the "*Holy Alliance*."

In Portugal there had been another partial change of ministry. The capital was quiet and the country prosperous.

The plague rages with great violence in Egypt; 14,000 pilgrims are said to have died in one day at Mecca.

In the London and Liverpool cotton markets there had been no material change in prices—those markets, however, were declining.

CONTENTS OF THIS NUMBER.

Notices—of Agricola's communication on Rice bread, &c.—of the article on raising Clover seed—of the Eastern Shore Agricultural Society—Remarks—on the fertilizing quality of Clover—on the cultivation of timothy in Missouri—Notice of Miss Reed's beautiful Passion Flower—Proposed Cattle Fair—Agricola on Rice bread—on Corn mixed with other crops—Essay on the best method of saving Clover seed—Harvesting of corn—discovery of a bed of the Carbonate of lime—Notice of the Hon. Mr. Barnitz' hogs, together with his communication descriptive of them, and of his mode of feeding them—Cure for gapes in chickens—poetical description of the silk worm—Lord Byron's dog and butler—Magnetic power applied to mechanical uses—domestic happiness of the cottager—Sadness—New and important discovery—Recipes—for making damson cheese—to preserve grapes—to preserve tomatoes—to make yankee bread—to make rhubarb pies—Method of destroying moles—Domestic summary—Foreign abstract—Prices Current, &c.—Advertisements.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,	bushel.	2 50	
CATTLE, on the hoof,	100lbs	5 00	6 00
CORN, yellow,	bushel.	77	80
White,	"	77	80
COTTON, Virginia,	pound.	18½	
North Carolina,	"		
Upland,	"	18½	20
FEATHERS,	pound.	37	40
FLAXSEED,	bushel.	1 25	1 37½
FLOUR&MEAL—Best wh. wh't fam.	barrel.	7 25	7 75
Do. do. baker's,	"	6 75	7 25
Do. do. Superfine,	"	6 12	6 37
Super Howard street, dull	"	6 00	
" " wagon price,	"		5 75
City Mills, extra,	"		6 12
Do.	"		6 00
Susquehannah,	"		5 87
Rye,	"		5 00
Kiln-dried Meal, in hhds.	hhd.	19 00	
do. in bbls.	bbl.	4 00	4 25
GRASS SEEDS, red Clover,	bushel.	5 00	5 25
Timothy (herds of the north)	"	2 75	3 25
Orchard,	"	1 50	2 50
Tall meadow Oat,	"	2 00	2 50
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.		15 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
Hogs, on the hoof,	100lb.	7 00	7 25
Slaughtered,	"		
HOPS—first sort,	pound.	12½	
second,	"	10	
refuse,	"	8	
LIME,	bushel.	33	35
MUSTARD SEED, Domestic,	"	5 00	6 00
OATS,	"	35	38
PEAS, red eye,	bushel.		
Black eye,	"		1 25
Lady,	"		
PLASTER PARIS, in the stone,	ton.		3 50
Ground,	barrel.	1 25	
PALMA CHRISTA BEAN,	bushel.	2 00	
RAGS,	pound.	3	4
RYE,	bushel.	70	73
Susquehannah,	"	none	
TOBACCO, crop, common,	100 lbs	4 50	5 00
" brown and red,	"	5 00	7 00
" fine red,	"	7 00	9 00
" wraperry, suitable	"		
for segars,	"	5 00	10 00
" yellow and red,	"	8 00	12 00
" yellow,	"	9 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality, ..	"	4 00	
" ground leaf,	"	5 00	8 00
Virginia,	"	5 00	10 00
Rappahannock,	"		
Kentucky,	"	8 00	14 00
WHEAT, white,	bushel.	1 25	1 30
Red,	"	1 15	1 22
WHISKEY, 1st pf. in bbls. }	gallon.	37	37½
" in hhds. }	"	36	
" wagon price,	"	33	33½
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 50	
To Wheeling,	"	1 75	
WOOL, Prime & Saxon Fleeces, ...	pound.	62 to 75	32 to 34
Full Merino,	"	52	62 30 32
Three fourths Merino,	"	47	52 28 30
One half do.	"	42	47 26 28
Common & one fourth Meri.	"	38	42 25 26
Pulled,	"	38	42 26 28

VALUABLE STOCK FOR SALE.

A FULL-BRED Durham short horn yearling BULL, a very superior animal; a 7-8 blood, same age; also two COWS, 4 years old, 3-4 blood, in calf by a full-bred Bull. Pedigrees given in full. Applications for any of the above cattle to be made to the Editor of the Farmer and Gardener, by whom the terms will be made known.

Letters from a distance must be post paid. June 30th.

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

VIRGINIA.	
U. S. Bank,.....par	
Branch at Baltimore,....do	Farmers Bank of Virginia, 3a
Other Branches,.....do	Bank of Virginia,.....do
MARYLAND.	
Banks in Baltimore,....par	Branch at Fredericksburg, do
Hagerstown,.....3a	Petersburg,.....do
Frederick,.....do	Norfolk,.....do
Westminster,.....do	Winchester,.....do
Farmers' Bank of Mary'd, do	Lynchburg,.....do
Do. payable at Easton,....do	Danville,.....do
Salisbury,.....5 per ct. dis.	Bank of the Valley,....do
Cumberland,.....3a	Branch at Romney,....do
Millington,.....do	Do. Charlestown,....do
DISTRICT.	
Washington,.....do	Do. Leesburg,.....do
Georgetown, } Banks, 1.	Wheeling Banks,.....do
Alexandria, }	Ohio Banks, generally 3a3½
PENNSYLVANIA.	
Philadelphia,.....1a	New Jersey Banks gen. 1½a2
Chambersburg,.....3a	New York City,.....½a
Gettysburg,.....do	New York State,....2½a3
Pittsburg,.....1½a2	Massachusetts,....2a2½
York,.....½a	Connecticut,.....2a2½
Other Pennsylvania Bks. 1½a2	New Hampshire,....2a2½
Delaware [under \$5]....3a4	Maine,.....2a2½
Do. [over \$5].....½a1	Rhode Island,....2a2½
Michigan Banks,.....5a	North Carolina,....3a4
Canadian do.....5a½	South Carolina,....2½a3
	Georgia,.....4½a5
	New Orleans,.....do

GOOD AND CHEAP MANURE.

THE Subscribers offer for sale 5000 bushels of plaister of old buildings. Recommended by Sir Humphrey Davy as a most valuable manure, particularly for clayey or stiff soils—containing much carbonic acid, acting immediately and assisted in its action by the sand with which it is mixed.

Price 4 cents per bushel or \$1 for every two horse cart load.

sep 8

SINCLAIR & MOORE.

NOTICE TO CAPITALISTS.

THE undersigned having been engaged for a number of years past in the Linnean Garden & Nurseries at this place, in a department where he has had every opportunity of becoming thoroughly acquainted with the business, wishes to form a connection with some person of capital, either as active or silent partner, for the purpose of carrying on the *Nursery & Garden Seed business*. To a person wishing to engage in a lucrative business, it is an opportunity rarely to be met with. Any communications addressed to the subscriber, will be treated as strictly confidential.

G. R. GARRETSON.

Flushing, L. I.—Sept. 1st, 1835.

sep 8

OYSTER SHELL LIME.

ORDERS for any amount of the above valuable article will be received and promptly filled if left at this office. The incalculable value of lime as a manure is so well known that it is useless to dwell upon it in this advertisement. It will be delivered at any convenient landing place on the Chesapeake bay or its tributary waters, which may not be more than 70 miles distant from *Worton Creek*, Kent county, at 8 cents per bushel. Unburnt shells delivered at 4½ cts. per bushel.

se 8

DEVON BULLS.

FOR SALE—Two full blood Devon Bulls. The first is a beautiful animal, 9 years old, of the purest blood and fine form, raised by one of the first breeders in the country; the other is a fine young animal, 1 year old, got by the above, out of a first rate Devon Cow. These animals will be sold on reasonable terms, their superior qualities being considered. Enquire of the Editor.

sep 8

3t

THE AMERICAN FARMER.

FOR SALE, at the office of this paper, a few complete sets of the above valuable work—a work which in itself is a perfect Farmer's Library.

Gentlemen who may be disposed to possess themselves of a copy will do well to apply early.

aug 4

50 BUSHELS OF BUCKWHEAT, suitable for seed, just received and for sale. Apply to
June 16th. SINCLAIR & MOORE.

THE SUBSCRIBER offers for sale at the Maryland Agricultural Repository, Light street, a large and general assortment of

PLOUGHS.

The Self-Sharpening Plough possesses the advantage of having a moveable steel point, from fifteen to twenty-four inches long, which can be reversed, as a bevel is formed by wearing, and advanced as it becomes shorter, so as to bring into actual wear from twelve to eighteen inches of solid wrought bar; by thus changing the point, the share continues to perform its work well until worn off nearly up to the mould board; whereas, without this moveable point, shares are generally rendered useless when only half worn.

This valuable principle may be applied to any shape of mould board.

SELF-SHARPENING.

- No. 00. The smallest size is a 7 inch seed and cultivating plough price \$5 00
- No. 0. A one-horse cultivating plough, 8 inches wide, nearly the same length as the smaller one, but has a bolder mould board, and better adapted to sandy lands. The shares and heels of these two sizes suit each other - 5 25
- No. 1. A light two-horse - 6 25
- " 2. A two-horse plough, 9 inches wide - 7 00
- " 3. A two-horse flushing plough - 8 00
- " 4. A heavy three-horse plough with sword coulter - 12 00

WOOD'S PATENT.

- No. 21. A seed and cultivating plough, 8 inches wide, with cast share - 5 00
- Corn. A one-horse plough, with wrought iron standard and cast share - 5 50
- No. 1. A. Is a light two-horse plough, 9 inches wide - 6 50
- " 1½. A two-horse plough, with sword coulter and cast share, a superior flushing plough - 8 00

The above ploughs of Wood's Patent are entitled to two extra shares each, at the above prices.

SINCLAIR & MOORE'S IMPROVED.

- 6 inch. A superior seed plough, with cast shares - 4 50
- 7 " A one-horse ditto ditto - 5 00
- 8 inch. A light two-horse plough, with cast shares - 5 50
- 9 " A two-horse ditto ditto - 7 00
- 10 " A two or light three-horse plough, with sword coulter and cast share - 9 50
- 10 " A three-horse plough with wrought share - 10 00
- 10 " A three-horse plough with sword coulter, a superior flushing plough, made both right and left handed - 11 50
- 12 " A heavy three-horse plough, with sword coulter - 14 00

M'CORMICK'S PATENT.

- 7 inch. One-horse wrought shared plough - 5 00
- 8 " Light two-horse ditto ditto - 7 00
- 9 " Two-horse plough, with sword coulter - 9 50
- 10 " Three-horse plough, with coulter - 11 50
- 12 " Heavy three-horse plough, with coulter - 14 00

BAR-SHARE.

- No. 1. Is a 7 inch plough, with wrought share and lock coulter - 6 25
- " " Is a 7 inch plough, without coulter - 5 00
- " 1½ A one-horse plough, with wrought share and coulter - 7 00
- " 2. A light two-horse plough, with wrought share and coulter - 8 00
- " 3. A two-horse plough, with wrought share and coulter - 9 50
- " 3½. A heavy two-horse plough, with wrought share and coulter - 10 00
- " 5. A heavy three-horse flushing plough, with wrought share and coulter - 13 00

HILL-SIDE.

A plough suited to two horses, with cast share, changes with ease, so as to throw the furrow to the right or left - 10 00

SHOVEL-PLOUGH.

Wrought shares - 4 50

CARY-PLOUGH.

- No. 1. A one-horse plough, having nearly the form of mould board as the well known Cary or Dagon plough, but has a cast iron mould board and wrought share. The mould board is bold, opens a wide furrow, does clean work, and is very

strong and simple in its construction - 5 00

No. 2. A light two-horse plough of the same construction. - 6 50

BUFFALO PLOUGH.

- No. 1. H. A one-horse plough, with cast share - 5 00
- No. 1½ H. A two-horse plough, with cast share - 8 00
- " 2. H. Heavy two-horse ditto, - 9 00

The form of the mould board of these improved ploughs, is somewhat on the principle laid down by Thomas Jefferson, but varied so as to equalize the pressure on the mould board, as observation in the practical use has directed.

DOUBLE MOULD BOARD.

Two sizes; a very useful plough for cultivating potatoes, &c. and for ploughing up potatoes at the time for gathering the crop. Price \$7 00 to 10 00

EXTRA CASTINGS FOR PLOUGHS.

Together with several new patterns, which will be sold low.

CULTIVATORS.

Those with five wrought tines, of the most approved shape - 5 25

Five tines, of more simple form - 5 00

Cast tined - from 3 50 to 4 00

If made to expand, 50 cents additional.

WHEAT FANS.

Improved - \$24 00 to 25 00

Ditto extra large - 28 00

Ditto ditto recent improvement - 33 00

Common Fans - 19 00

Box Fans, small size - 15 00

STRAW CUTTERS.

20 inch. Cylindrical straw cutter, suited to horse or water power, capable of cutting from 75 to 100 bushels per hour - 75 00

Extra knives per set - 6 00

14 " Box same construction, suited to manual power - 45 00

Extra knives per set - 5 00

11 " Box - 27 00

Extra knives per set - 4 00

These machines are self-feeders, the knives are of spiral form, and act on the bed steel in such a manner as to cut with great ease without a very keen edge: many thousand bushels have been cut with them without sharpening the knives.

Common Dutch straw cutter with treadle - 7 50

Ditto without treadle - 5 00

CORN SHELLERS.

Of the various kinds offered to the public, the one generally preferred is that with a vertical iron wheel with spring holders, which adapt themselves to any sized ears. There is no machine more certain to answer the intended purpose; they are very durable and easily kept in order, and will shell from 15 to 20 bushels per hour by hand, and are now sold at the reduced price of \$19 00, with a discount of five per cent. if cash be paid.

JAMES MOORE,

Successor to SINCLAIR & MOORE.

DURHAM STOCK.

A gentleman about to emigrate to the South, will dispose of three superior animals of the improved *Durham Short-Horn* breed, the one a bull rising 4 years old, a cow between 9 and 10 years old, and her bull calf 3 months old on the 1st September, instant. The bull was raised by Dr. Pool, of *New Brunswick, Maine*, got by imported thorough-bred Bishop, by Wellington—out of a thorough-bred imported cow, called Maria; the cow is imported, and is a beautiful animal, having every mark and point of a thorough-bred, her colour white ground with red flecks and spots; she has given from 6 to 8 gallons of milk per day. Her calf now three months old, is also a most beautiful animal, partaking of the marks and points of his mother; he was got by the first named Bull. As the owner is anxious to sell, a bargain may be had on early application.

Letters concerning the above cattle, post paid, directed to the editor of this paper will be promptly attended to.

sep 1

GRASS SEED.

Fresh ORCHARD GRASS, HERDS and TIMOTHY SEED, just received and for sale at the Maryland Agricultural Repository, Light st.

JAMES MOORE,

Successor to SINCLAIR & MOORE.

ag 25

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 20.

BALTIMORE, MD. SEPTEMBER 15, 1835.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, SEPT. 15, 1835.

SILK MANUAL.

The proprietors of the *Farmer and Gardener*, Baltimore, have in the press, and will speedily publish, a complete *Manual of the Mulberry and Silk Culture*; compiled from the best and most authentic sources. As the object is the promotion of a great public interest, the cost will be moderate.

Our editorial brethren with whom we exchange, will confer a favor on us, which will be reciprocated, and benefit their readers, by publishing the above.

LIME.—We respectfully call the attention of land-holders on the Chesapeake bay, and the navigable waters emptying into it, to the advertisement in this day's paper of lime for sale at 8 cts. per bushel. We do not wish to dwell upon the fertilizing properties of lime in this paragraph, nor is it our purpose to point out the manner of its acting, it being sufficient to our present purpose to say, that a hundred bushels of lime put upon an acre of ground with one clover lay to be ploughed in, will in four years so renovate the soil as to make land which may now bring but from 6 to 8 bushels of wheat to the acre, produce from 20 to 25 bushels. Nor need we remark, that land once brought to this tilth, can be maintained in its integrity by judicious management under the operation of the four shift system, or rotation of crops. Need we tell agriculturists that their interest requires they should, without delay, enter upon this cheap mode of improving and restoring their lands? We think not; the obvious propriety of the measure so clearly and distinctly marks out the course which they ought to adopt as to render that duty wholly unnecessary on our part.

We have received several numbers of the *Metropolitan*, a semi-weekly paper published at Georgetown, in the District of Columbia. It is

devoted to "literature, agriculture, the mechanic arts, foreign and domestic intelligence, and general miscellany," and we but speak our real sentiments of its merits, when we say, it is a most ably conducted Journal. Its literary department is well sustained with matter, original and selected, suited to the purposes of the parlor, and the general direction given to the mind of the reader, and is happily adapted to promote a spirit of inquiry, and a thirst for knowledge. We sincerely wish the enterprising proprietors and editors success; certain that, should they be patronised in proportion to their merit, the measure of their reward will amply gratify their utmost pecuniary desires.

PROPOSED CATTLE FAIR.

Having been solicited to hold a CATTLE FAIR for the sale of superior animals of the various IMPROVED IMPORTED, and other breeds, the proprietors of the *Farmer and Gardener*, Baltimore, take this occasion to notify all owners of any of the following kinds of stock, that if sufficient encouragement offer, they will, on the day following the termination of the Central Course Races, this Fall, hold the same. All owners of such stock in this, and the adjoining states, who may be disposed to send the same to their fair, will please communicate with them by letter, in time for their letters to reach them by the 10th instant, it being their desire to publish their prospectus on the 22d, should sufficient encouragement offer.

They desire to embrace within the range of animals to be sent:

IMPROVED DURHAM Short Horns:—full blooded, and grades, whether imported or raised in this country.

DEVONS, full blooded, and grades, whether imported or raised here.

Superior OXEN, well broken, whether of improved imported, or native kinds.

Superior MILCH COWS of native stock.

SHEEP—Improved Bakewell, }
Saxon, } full blooded,
South Down, } and their res-
Merinoes, } pective grades.
Dishleys, }

Superior HORSES of all kinds.

MULES

JACKS

Various breeds of HOGS, remarkable for size and taking on fat.

In every instance, where the stock to be sent, are of the imported *full bloods*, or of their respective *grades*, certificates of pedigree, well authenticated, must be sent, as it is the wish of the proprietors to make their FAIR a mart where the agriculturists of our country may resort with a *certainty* of getting genuine articles—just such animals as they may believe they are buying.

Should the proprietors of the *Farmer and Gardener* be met with that spirit of generous reciprocity, which they believe due to their present effort, it is their purpose to hold ANNUAL OR SEMI-ANNUAL FAIRS, believing that they will not only conduce to the immediate interest of farmers and those engaged in raising stock, but to the country at large; for they hold it to be a tenable position, that whatever tends to advance one great national branch of industry, is necessarily promotive of the whole. The convenience to the agricultural community, of such an establishment as a great mart to which they may resort with the certainty of selling any fine animals they may have to dispose of, or of procuring such as they may desire to purchase, will be obvious at the first blush. It will stimulate all concerned in raising fine animals, to spare no pains in their breeding, because the certainty of obtaining fair remunerating prices, offers at once to them a guaranty and an inducement; nor will its influence prove less beneficial to those who may merely wish to attend as purchasers, because, in the scrupulousness with which all pedigrees will be exacted and scrutinized, they will be sure of being protected from imposition.

As the object of the proprietors will be more to further and promote the interests of that class of the community with which their own is so closely identified, than to realize any immediate profits, their terms, which will be hereafter announced, should the Fair go on, will be moderate. For the present they will observe, that they contemplate the erection of such accommodations as will allow separate apartments for the stock of each gentleman who may favor them with his patronage.

Careful persons will be employed to give constant attendance upon the animals, so that the utmost reliance may be placed in their being well fed and taken care of.

AN HOUR AT CLAIRMONT.

We passed an hour at Clairmont Nursery, a few evenings since, being chiefly attracted thither by our desire to see the crop of corn, which, at the date of our last notice, was not in a very promising condition; but as we predicted it would, with the cold of the spring, its unsightly appearance disappeared, and it now gives assurance by its athletic size, dark green colour, and large well filled ears, that it will yield an excellent crop.—The stalks are two and three in a hill and most of them with two ears on. This corn grows in a bottom of black and deep loam, much of it alluvial deposits from the overflowing of the Herring Run, before the estate came into the possession of Mr. Sinclair. It is naturally rich, and the corn in consequence was not manured, but nevertheless, most of the stalks have attained the height of ten and twelve feet.

We mentioned in our notice in our tenth number, that he had several acres in potato culture—both in hills and in drills. We had curiosity to examine one of the hills and were pleased to find the potatoes well grown and tolerably productive. They are of the *Mercer* kind, and we should suppose the hill contained the fourth of a peck, which as the hills are 3 feet square a part, would make 4840 to the acre, or an aggregate produce, of about 300 bushels. This, considering that the ground received no extra manuring, is a very fair result—and we cannot close our remarks on this point, without observing, that we were very much gratified with the great facility which the hill-culture affords for harvesting the potatoes.

The beautiful appearance of Mr. Sinclair's Nursery of *Morus Multicaulis*, the *Chinese*, or many stalked mulberry, is, we confess, beyond our powers of description. There are about two thousand on one spot, from 6 to 8 feet high, covered with leaves from the earth to the very topmost points of their branches—and such leaves too; nearly as large as a plate; so silky and so exquisitely lovely in their peculiar shade of green. At the distance of a few feet the impression which a view of the orchard makes upon the mind, is most singular, indeed; instead of appearing to be the leaves on the branches of trees, the mind is almost filled with the belief that it beholds a continuous and dense body of the most delightful foliage. If there were nothing else to be seen at Clairmont, this sight alone is worth a ride of many miles to any one who has enthusiasm enough to associate the history of this tree with the incidents probably to be developed by a few years, as connected with the prosperity of many of the

states of this republic. For ourself, we can read in those very broad, pendulant, glassy leaves, a portion of history which fills us with feelings which we could not if we would, and would not if we could, describe—we behold in them the elements of union to these states—and in that, our gratitude is complete.

We saw too, another nursery of about 2,000 flourishing young trees of yellow mulberry from 8 to 10 feet high, in the most healthful and growing condition. This is, by the bye, a tree that every landholder ought to have on his estate—its great value as timber for ship building and for posts for fences, commend it to every one. We have seen it stated somewhere, and where we cannot call to mind just now, that in twelve years, trees may be raised from the seed worth for ship building \$5; if so, an acre planted at 40 square feet apart would yield upwards of \$1200. The transplanting of forest trees, however, has not yet become *fashionable* in our country, and therefore, as *fashion* controls every thing, we must await an *importation*.

In our attention to the more *useful*, we had almost forgot to mention a peep which we took at a bed of most choice *Dahlias*, which were then, (last Thursday week) in full bloom, offering a sight which every lover of *Flora* might well covet. To sum up their eulogy in a few words; they are the most magnificent and imposing of all the *Floral* tribe—they are so large, so double, and so variant in their hue, comprising almost every tint from white to deep crimson, it is impossible to conceive a sight more pleasing or gratifying.

One word for the *pigs*—which “though last are not least” in our estimation—we saw between twenty-five and thirty fierce looking young grunners of the *Thin Rind* and *Barnitz* breeds, which in a few weeks will be fit to fill orders, and we sincerely wish they may find in their new masters a disposition to do them *justice*, so that they may grow up and do credit to their high breeding.

We have read with much pleasure the first Annual Report of the proceedings of the *Rensselaer Agricultural Society*, of New York, as also the Address of S. Blydenburgh, Esq., delivered at the first meeting of that society in 1834. The report contains the constitution of the association, and a very patriotic address to the farmers of the county, pointing out in an appropriate manner the advantages of such institutions, and appealing to their pride as agriculturists to become members. The address of Mr. Blydenburgh is sensible, judicious and in a very happy style, evincive alike of

research and laudable zeal in behalf of the noble cause of the tillers of the earth. And we take this occasion to return to its enlightened author, our unfeigned acknowledgements for the delight we experienced in its perusal.

TREATMENT OF MILCH COWS.

There is, perhaps, no part of the husbandry of our country so much neglected as that which relates to the providing of provender for the milch cows on our farms. On many estates, even those of magnitude, the chief part of the feed, if not the entire, which they get are the blades, the tops and the husks of the corn, with an occasional gratuity of nubbins by way of a holiday feast. The consequence is, that if the winter be severe and protracted, there is nine chances out of ten, that every cow, long before spring arrives, is either dry, or so near it, that the milk she will give is not worth the trouble and cost of *stripping*, so that many farmers with half a dozen or more cows have neither milk nor butter sufficient for the domestic uses of their tables, during the latter part of each winter; and by the time that the cold and bleak winds of March arrive, many of the cows are on the *lift*. How is it possible that it can be otherwise? There is little or no succulence in the food we have described in its dry state, and consequently cows fed upon it, must, for the want of matter convertible into milk, cease to yield it. In every other country save our own, it forms a part of the business of every farmer or planter, to provide full supplies of nutritious food for his stock of every kind, and for those which comprise his dairy cows, especial pains and care are taken to provide a sufficient quantity of such roots as are heartening and succulent, so that, by thus providing a substitute for the grasses of the pastures, or the soiling stalls or yards, his dairy even through the dreary and inclement period of the winter, may continue to contribute largely to the comfort of his family, and to the increase of his fortune. No good farmer there, will keep more cows than he can *keep well*, and in so keeping them, he finds his interest rewarded, and has besides, the satisfaction of knowing, that in thus acting he has fulfilled an obligation imposed upon him by every humane consideration, and discharged a duty required by Him, who, in placing the beasts of the fields in subjection to man, enjoined that he should extend towards them his kindest protection and care. We frequently hear gentlemen complaining of the difficulty of procuring such cows as will make profitable returns, and of the impossibility of keeping them to their milk during winter. The reason is obvious. No cow, and we care not what her breed may be,

whether she be of the improved *Durham Short-Horn*, the *Devon*, the *Alderney*, the common cow of the country, or any other kind—we say no cow can be kept to the milk pail unless you give her something which will both nourish her system and replenish her udder. To make a cow yield a liberal supply of milk through the winter, she should have in addition to full supplies of good, wholesome hay or fodder, at least half a bushel of roots of some kind, or an equivalent of cabbages or kale, per day. And if the hay should be fed *long*, each cow should have at least two days in the week, messes of chopped rye and cut straw, to be either steamed or mixed up with boiling water, and permitted to remain until it be fermented before feeding. What, we would ask, would be the appearance of those splendid improved *Short-Horn Durhams*, of Col. *Powell*, of Philadelphia, of General *Van Rensselaer* of Albany, of Mr. *Hall* and Dr. *Hosack* of New York, of Mr. *Thompson* of Frederick county, Maryland, or of Mr. *Canby*, of Delaware, if they were fed through the winter upon the ordinary feed which is doled out to the cattle of a majority of the farmers of our country? Why, the month of March would find them with scarcely strength to carry their noble frames, if it did not find them in a state to render it absolutely necessary, in order to maintain an erect position, to seek the aid of some convenient fence corner. The ambition of procuring fine breeds of animals of all kinds, is one worthy of every praise; but *that of taking good care* of what we have, is equally, if not more laudable. Besides these considerations, the interest of every farmer is always promoted by feeding his cows well. If fed in the niggard manner we have described, their keeping, such as it is, is a dead loss to their owners, they make no manure worth speaking about, and the animals themselves are comparatively valueless: and if kept *generously* through the winter, and sheltered from the weather, each cow will give her two gallons of milk per day and make from four to seven pounds of butter per week, which latter should be set down as the profit, as the milk and cream consumed by the family, will more than compensate for the feed. In addition to this, animals thus fed make three times the quantity of manure, and are always in a condition to command good prices. We have indulged in no speculative theories in what we have said, but have addressed ourself to the common sense of the agricultural community, in the hope that they will see the propriety of adopting some plan by which our object can be attained.

A poor freedom is better than a rich slavery.

BRIEF GLOSSARY OF SOILS.

Loam.—By this term is meant any of the earths combined with decayed animal or vegetable matter.

Clayey-loam.—Means that soil of which its greatest proportion is clay.

Sandy-loam.—When the greatest proportion is sand.

Brown-loam.—When the greatest proportion consists of decayed vegetable matter.

Rich-black-loam—when sand, clay, animal and vegetable matters are combined in unequal proportions, the clay greatly divided, being in the least proportion, and the sand and vegetable matter in the greatest.

The terms *light-sand-loam*, *light-brown-loam*, &c. are varieties of the above.

[From the Philadelphia Sat. Evg. Courier.]

THE CATTLE OF WALES.

CONTINUED.

GLAMORGANSHIRE.—The Glamorgans were once in high repute, and deservedly so. George III., who was a good judge of cattle, was very partial to them, and one of his agents yearly visited Glamorganshire, to keep up his Majesty's stock by a selection of the best cattle that county could produce.

D. T., the Welsh topographer, who wrote in the Cambrian language in 1720, speaks of the cows as being large, some red, and some pied, with a sleek coat, and a fine head. Although we have traced the white ox with red ears to Glamorgan, and the neighboring county, Brecon, yet the old legends agree that the domesticated breed was of a reddish colour, and that they had some of the Norman and Devon blood in them. This is accounted for by some of the chroniclers. A great part of Glamorgan was, in the twelfth century, seized by Robert Fitzhamon and other Norman Knights. Their connexion with their native country did not immediately cease, and they introduced some of the Norman cattle into South Wales. The swelling crest of the Glamorgan ox, at once reminds us of the Norman bull. Did they spread from Glamorganshire to Anglesey, the cattle of which island are also recognized by the peculiar swelling of the breast, and lofty bearing of the head; or may we consider this stateliness of appearance as indicative, in both districts, of the native breed?

We are also told that Sir Richard de Grenville, one of the Knights who divided among them the Lordship of Neath, also possessed the castle of Bideford, on the Northern coast of Devonshire, and introduced many of the Devon cattle. This we can easily imagine, for in the old red-cow, which we can recollect nearly fifty years ago, an admixture of Devon blood could not be for a moment mistaken, and it is even yet evident in the horns, the lively countenance, and the deer-like head and neck. The red, however, was then degenerating into brown, and the brown has been gradually darkening from crosses with the Pembroke black. Some of the original reds are to be met with occasionally in the hilly districts, and

particularly in the neighborhood of Aberdeen; but the poverty of the soil has much reduced their size. Not a great many years ago there was in the valleys of the Neath and the Towy, a breed of cattle of a light red colour, and with white faces, which were said to have been the ancient stock of the vale of Glamorgan. Although not so large as the brown breed of the vale, they were good milkers, and fattened kindly. They were not, however, always pure, but occasionally crossed with the stunted blacks of the neighbouring parts of Carmarthenshire.

The Glamorganshire farmers, of half a century ago, took great pride in their cattle, and evinced much judgment in their breeding and selection. There was one principle from which they never deviated:—*they admitted no admixture of foreign blood*, and they produced the Glamorgan ox, so much admired for activity and strength, and aptitude to fatten; and the cow, if it did not vie with the best milkers, yielded a good remunerating profit to the dairyman.

They were of a dark brown colour with white bellies, and a streak of white along the back from the shoulder to the tail. They had clean heads, tapering from the neck and shoulders; long white horns, turning upwards; and a lively countenance. Their dew-laps were small, the hair short, and the coat silky, if there was any fault, it was that the rump, or setting on of the tail, was too high above the level of the back to accord with the modern notions of symmetry.

Forty years ago the breed was eagerly sought after by the most skilful breeders, in Leicester, Northampton, Warwick, and Wilts. Their aptitude to fatten rendered them exceedingly profitable when taken from the plough at six or seven years old, and they were brought to great perfection on the rich English pastures—frequently weighing more than twenty scores per quarter.—The beef was beautifully veined and marbled, the inside of the animal was well lined with tallow, and the Glamorgans commanded the highest price both in the metropolitan and provincial markets. Mr. Davies, who wrote in the year 1814, says that “among the Glamorgan-vale browns good cow-beef weighs from eight to ten score pounds per quarter, although some weigh as much as twelve or thirteen scores. Ox-beef is from twelve to fourteen scores per quarter; some, however, have reached eighteen, and even twenty scores.

The steers were seldom yoked until three years old; they were then moderately worked for three or four years and well kept; and, after a few weeks' rest, they were usually disposed of at the large spring-fairs in this county, which then displayed a collection of fine oxen, not often surpassed in any of the English districts.

During the French revolutionary war the excessive price of corn attracted the attention of the Glamorganshire farmers to the increased cultivation of it, and a great proportion of the best pastures were turned over by the plough. Turnip-husbandry necessarily followed; and then the improvement of their sheep-stock became an object of importance, and the cattle were almost entirely neglected. A proper selection for breeding was unattended to; the calves were generally weaned at two or three weeks old, and nursed on milk and water, hay-tea, and boiled linseed; the produce of the cow being entirely reserved for the

dairy. The steers were taken to labor when they were two years old, and seldom exceeded four years when they were disposed of; they were depastured in summer, either on land too wet to carry sheep, or too bare for corn, and in winter they barely existed in the straw-yard.

The natural consequence of inattention and starvation was, that the breed greatly degenerated in its disposition to fatten, and, certainly, with many exceptions, but yet, as their general character, the Glamorganshire cattle became and are flat sided, sharp in the hip-joints and shoulders, high in the rump, too long in the legs, with thick skins, and a delicate constitution.

The Glamorganshire farmer was startled at the necessary result of this alteration of system. His cattle, instead of being eagerly sought after, and sold at an extravagant price, could scarcely be sold at all, or only at a serious loss. He was unwilling at first to acknowledge the real cause of this deterioration and diminution of value, and many of the breeders, even at the present day, take little or no pains to redeem their error.

A few spirited individuals, however, set the example; and others have been incited by their zeal and partial success to assist in endeavouring to restore the breed to its former pre-eminence, or, at least, to adopt it to the coarser fare which, under the altered state of husbandry, must now be to a great degree its lot.

Among these, and one of the most skilful and successful of them, was Mr. David, of Radyr, whose sketch of the deterioration and regeneration of the breed we are giving our readers in a somewhat condensed form. The result of these attempts has been, that, in the recent exhibitions of stock at Tredegar, the revived and pure Glamorgans have often successfully competed with the short horns and the Herefords; and Mr. David has received, at Sir Charles Morgan's cattle show, no less than twelve silver cups for his Glamorgans.

The work of improvement, however, as yet has been and could only be, in few hands. It is comparatively easy to keep up a good breed; but to regenerate a bad one, or, at least, a deteriorated one, requires skill, capital, and perseverance; and these called into active requisition in the face of hard times, and with little or no prospect of obtaining remunerating prices. Therefore it must be acknowledged at present, and perhaps it must long continue to be the fact, that the Glamorgans generally, are far from being what they once were. They continue, however, to maintain their character for stoutness and activity, and are still profitably employed in husbandry-work. Only a little while ago four Glamorgan oxen ploughed with ease half an acre of clover hay in two hours and three quarters. The beef is still good, marbled, and good tasted; and in proportion as the value of the ox to the grazier has decreased, the value of the cow has become enhanced for the dairy.—He who is accustomed to cattle will understand the meaning of this; and the kind of incompatibility between an aptitude to fatten in a little time, and on spare keep, and the property of yielding a more than average quantity of milk.

Advise not what is most pleasant, but what is most useful.

[From the Genesee Farmer.]

THE CULTIVATION OF WHEAT.

The following paper on the cultivation of wheat, was read before the Agricultural Society of this State at its meeting in February last, by H. Hickcock, Esq. of Rensselaer county.

There are two causes which, when our winters are open, operate injuriously on wheat crops.—One is, the high and dry winds, which prevail in March; these blow off the soil in many situations, and by leaving the roots of wheat exposed, occasion their destruction. Another cause, is the heaving of the soil, occasioned by the alterations of cold and warm weather. The water in the soil, in the act of freezing, expands and raises up the earth, and also the roots of the wheat plants which the earth embraces when a thaw succeeds, the earth being heaviest, falls down first and leaves the roots of the wheat a little elevated, and by repeated changes of the weather, the roots are so far thrown out as to perish.

Farmers, when convenient, usually sow their winter grain early in September, upon a supposition which guides their common practice, that grain thus early sown withstands best the action of unfavorable seasons. This supposition, is founded upon the very plausible theory, that as the oldest roots will be longer and more numerous and take a firmer hold of the soil than those which are younger, they will be less exposed to be thrown above it, and at the same time, from their strength, be more tenacious of life. But experience informs me, that wheat, sown as late as the first or even the second week in Oct. very often survives with less injury than that which is sown in the early part of September. Indeed farmers very generally admit, as the result of their experience, that rye, whose laws of vegetation must be nearly the same as those of wheat, sown so late in the season as barely to come up, is most likely to withstand an unfavorable winter. Still the very plausible theory, which has been mentioned, very generally induces them to sow rye early as well as wheat, in direct opposition to conclusions, which have been drawn from actual observation.

An experiment was made last autumn for the purpose of collecting some further information on the subject. On the first day of September last, I excavated a spot of ground six feet square. On the one side, the excavation was about six inches deep, on the opposite side, the depth did not exceed one inch. Seed wheat was placed over the bottom, so that the kernels were about four inches distant from each other; the excavation was then filled up. The soil was a suitable mixture of gravel, sand and clay, for wheat; and of ordinary fertility. This was the latter part of the extreme drought which prevailed last summer, and the soil was dry, warm and finely pulverized before it was thrown on the wheat. The circumstances, except the extreme dryness of the soil, were highly favorable to the vegetation of seed at the greatest depth in the earth. On the fourth of the month there was a heavy shower which not only wet the soil, but beat it down close and hard. On the ninth of the month, the plants began to show themselves; but none come up from a greater depth than about three and one-half inches. Two or three days after the second leaf had displayed itself, some of the roots were taken up and exam-

ined. It now appeared that nearly an inch below the surface of the ground, a new joint was found which was the basis of the second leaf, and also of a new system of roots. There were now two tiers of roots; the seed or knot adjoining it, had generated the lower tier, and the new joint the upper one. These two tiers or systems of roots were connected together by a root resembling a cord or thread, and in one instance, cut off this connecting thread and transplanted the upper part. This grew with a little apparent check from its curtailment; but the under part died, although the soil above was opened so as to afford it the advantages of air and solar heat. On the 20th day of September, I examined another plant, which had its regular formations as expected, and, what was not expected, a blade was discovered about an inch long, which had started from the lower system of roots and would doubtless have found its way to the surface, had it not been disturbed. It is to be remarked, that this plant sprung from seed placed under cover of nearly four inches of soil, which was about an inch deeper than any of the other plants examined, and that some of the tops of the wheat plants had been eaten off and trodden down by accidental intrusion; a fact unregarded at the time. On the 26th day of September I examined another root, expecting to see the blade from below more perfectly developed, none however was discovered; but a third tier of roots was found at the surface of the ground, which proceeded from the second as that had from the first system of roots. On the 16th day of October I placed some seed wheat about two inches in the ground; their delay in coming up induced me to suppose that they had perished from cold and wetness; but at the expiration of three weeks they made their appearance, and although the ground remained open several weeks longer, no second leaf appeared, of course no joint or second system of roots had been formed. The very different formations in the roots of wheat, which this experiment has disclosed, proceeded from causes appropriate and capable of being ascertained, but to distinguish them with certainty, other trials must be made and conducted with greater accuracy than the one of which an account has been given.

From these experiments, though inaccurate, some conclusions may perhaps be drawn of practical use. All plants which live over winter, possess an apparatus, by which they supply themselves, in autumn, with food for their sustenance in spring. This food consists mostly of saccharine matter, which is enclosed in a proper receptacle. When this receptacle is formed near the surface of the earth, the fermentation of its contents is excited by frequent changes of weather, the saccharine matter is decomposed, and the plant perishes from the want of food, and perhaps also from a rupture of its vessels.

All wheat, shallow-sowed, must have its reservoirs of food but slightly covered with soil, and of course they are fully exposed. When wheat is sown early at any depth, a second, and sometimes a third system of roots is formed within an inch of the surface.* In these, many stems origi-

* Remark by the Editor of the Farmer and Gardener.—Dr. Darwin says when the grain of

nate, each of which has its receptacle of nourishment at its base, and it is quite certain that in most instances, the food, which was contained in the seed and the adjoining knot, is entirely exhausted by the supplies of nourishment it affords the upper portions of the plant. The life of early sowed wheat must then, like that which is shallow sowed, depend upon the preservation of the reservoirs of saccharine matter which are placed at or near the surface of the ground, and of course exposed to the unfavorable action of variable weather during winter.

Wheat which is late sowed, generates no second blade or new system of roots, and of course, the nourishment for spring's use is retained in the receptacle which adjoins the seed. If then we sow sufficiently late in autumn, and place the seed deep in the soil, we shall provide every security against the hazards of bad weather, which the nature of the case admits of.

In the ordinary course of husbandry, some of the wheat is necessarily deposited at a considerable depth in the soil, and when this takes place sufficiently late in the season, the receptacle of food will be protected by its covering of earth, and a partial crop will often be realized, although there may be when the spring opens, no signs of life on the surface of the field. In such cases the destruction of the blade, which issues from the seed-roots in autumn, can be of little importance, one would suppose that the surviving plants will grow the more vigorously, from there being less in number, and by tillering, produce many stems with large well filled ears; such, however is not the fact; and usually the stems are single and the heads are not large. To account for this, it must be recollected that after the ground has thawed in the spring, the earth settles and often becomes so extremely hard that doubtless many plants die, in their struggle to overcome the opposing resistance, and the surprise is, that any one should possess vigor enough to protrude even a single stem through the hard earth that covers it.

From this view of the subject, the practice may be recommended, of effectually harrowing the field in the spring after the ground has settled, in order to supply the plant with free air, and give a free passage to its upward growth. After the harrow has been used, the roller ought to be employed to reset such roots as have been displaced, and diminish the evaporation of moisture.

In England, a wheat plant has been taken up, separated into eighteen parts and replanted, and by successive divisions and replantations, a crop of three and one-third pecks of wheat was obtained in less than eighteen months from the time the seed was sown. If the roots of wheat can be so minutely divided and successfully replanted, there is little danger that the freest use of the harrow can be injurious—provided the roller be also used. The fact appears to be, that nothing is necessary to the vernal growth of the plant, but the preservation of the apparatus which contains the saccha-

wheat is buried two or three inches beneath the soil, an elongation of the Caudex occurs almost up to the surface, where another set of fibrous roots are produced, and the upright stem commences.

rine matter, which is its proper vernal food; so that if the roots and the top be cut off, and the bulb be planted in a genial soil, the plant will grow.

Notwithstanding the arguments which have been urged in favor of sowing wheat late, it must be conceded that when early sown and our fields are cultivated in the usual manner, it produces the largest crop, if it survive the cold season. Whether such improvements may not be made as to combine the benefits of a sure and large crop, is a question still open to investigation; the probability is, that both advantages may be secured, by a more correct knowledge of the proper time to sow, and of the best methods of culture.

In the first volume of the transactions of the society for the promotion of agriculture, arts and manufactures, instituted in the state of New York, it is stated that in Huntington, Suffolk county, fifty-two bushels of wheat had been raised by manure on an acre of land, and Mr. Downs is said to have raised, on a poor, gravelly, dry soil, by the use of fish as a manure, at the rate of one hundred and twenty-eight bushels of rye per acre. In this case, the rye would doubtless have lodged and been of little value, were it not that it was twice eaten off by his neighbors' sheep which broke into the lot; once when the rye was 9 inches high, and again when it was about 6 inches high.

The production of so large a crop of wheat and of rye must have proceeded from the causes which are steady and uniform in their operations, and if all the circumstances which had occurred to produce them had been distinguished and noted down, similar crops might have been again raised. Some things which occurred during the cultivation of this rye crop may be ascribed to accident or chance, so far as Downs' sagacity was concerned, but the causes which proximately occasioned the crop, did not work by accident or by chance, but agreeably to the laws or rules from which they never deviate. This uniformity of operation lays the foundation for making future discoveries, and brings within the grasp of our faculties the knowledge of increasing our crops by methods the least laborious and expensive.

The period may arrive when the farmer shall pursue his methods of culture with anticipation of the consequences which will result, analogous to that of the mechanic in the construction of a machine, and when, by direct means, he shall produce greater crops than ever were obtained by mere empirical trials.

Time was when the greatest philosophers taught the doctrine, that all things pertaining to the surface of the earth were too irregular and too much under the government of chance, to admit of scientific inquiry; this error has, within the two last centuries, been dispelled. But a similar error, in regard to rural affairs, is embraced by almost all our practical farmers, and the task of correcting and exposing it is developed, it would seem, upon the unaided efforts of a few individuals. Here then is the difficulty.

He who puts himself to trouble to pry into his neighbor's business, gains nothing but scorn, while he exposes an impertinent curiosity and vicious heart.

GREAT IMPORTATION OF IMPROVED SHORT-HORNED DURHAMS.

The N. Y. *Evening Star*, of Sept. 5th, gives the following description of eight splendid animals of the above breed, imported from England by the AGRICULTURAL SOCIETY OF OHIO. We think it not saying too much when we make the declaration, that if this association should never effect any other good than this accession of fine cattle to the stock of the country, they will be entitled to the gratitude of every agriculturist in it.

Should not this noble act spur on the farmers and planters of other states to follow their example?

THE SHORT-HORNED DURHAM OX.—“Some superior specimens of this famous breed of English cattle, were imported a few days since in the ship *Great Britain*, Capt. French, from Liverpool—having been purchased for the Ohio Agricultural Society, whose enterprising exertions we have before had occasion to advert to. We believe the present are the finest samples ever brought to this country. They are eight in number, two year old and yearlings. The largest, which is a two year old white bull, is of herculean size, but not on that account of gross or unwieldy shape, but of remarkable elegance and symmetry of proportions, both in the body, neck, head and limbs—presenting in fact, a beautiful model or study for a painter like Wouvermans, so famous for his cattle. He weighs 2500 lbs. and cost in England £200, making the whole expense of bringing him out about \$1000. What seems particularly to distinguish this breed of cattle, is the small elegant limbs, the robust muscular form of the neck, the fine contour of the head and face, and the short crumpled horn turned inward. The neck in this bull is of a depth fully equal to the length of the head, the small pointed nose forming with the forehead, throat and upper part of the neck, an isosceles triangle, of which the throat is the base line. The two year old cow, which stood in the stall next to the large bull, was of white color and nearly of the same size, also of elegant form. The yearlings composed of both sexes, were full as large as some of our full grown cattle. The animals were fed on the passage on hay and oil cake, (made of ground flax seed) and the sides of the stalls being cushioned, prevented any injury from the motion of the ship from which in fact they scarcely felt any inconvenience, as they very prudently lay down during a gale. The consequence is they have lost but very little flesh, and are in excellent health. The English boy who had charge of them, came out expressly for that purpose.

[From the Farmer's Register.]

ON SAVING CORN-STALKS, AND PREPARING THEM AS FOOD FOR CATTLE.

In my paper of the 25th March, I referred to another on the subject of the plan of saving a corn crop adopted by me, in such a manner as to reap from every part of the refuse a great benefit in the way of feeding my cattle. The appropriation of the stalk particularly, in this way, so as to make it yield the greatest benefit that could be

obtained from it, consistent with producing and saving the crop of grain, early arrested my attention, from reading a variety of communications for years back on the subject of the nutritive qualities contained in the stalk at particular periods—as also some experiments made in feeding with them. In the prosecution of this object, I was urged by succeeding in saving a corn crop in the manner pointed out by that valuable agriculturist Judge Buel, and which plan I had seen practised on the South Branch of Potomac, before reading it. I make this communication to you, sir, the more especially, as I have read in your highly valuable periodical, the "Register," some communications on managing the corn-stalk to advantage, and believing that I am considerably ahead in an economical use of it. Since the plan has been adopted by me, and its valuable effects exhibited, you will be assured I read with some pain the many labored communications so frequently given to the public, of judicious methods of turning the corn-stalk into manure, &c. The prodigious mass of valuable food produced from a field is another consideration that I am compelled to regard with much interest. All will readily acknowledge that at one stage the corn-stalk as a food for animals, exhibits highly nutritive qualities. Now to arrest, or save as much of those in it as possible, is one of the great arguments with me, in favor of my mode of saving the corn crop; but I am assured this is equally effected as regards the fodder and shuck.

After housing my corn crop, the first rainy day, if no more pressing wet work is calling for attention, all hands "go to shucking corn, and stripping off blades." If I am in want of this last species of forage for my plough horses, or mules, which by the by is not often the case, as my gama grass hay and oats cut in the sheaf with which the cutting trough is kept constantly replenished, supplies that want. In shucking the individual throws the corn in one direction, and lays the stalk with attention to regularity beside him, until he has an armful, when he takes them up carefully, and deposits them a short distance from him, in regular order for putting into the cutting box, where they are reduced, frequently stalk, shuck, and blade, to pieces of about an inch in length.

At a convenient distance from this apartment, three strong made hogsheds are placed, well pitched on the outside, made expressly for the purpose, with tops well fitted of light wood or straw, and standing on a platform about three feet from the ground, having at the bottom a large spiggot to let off their contents. Just before them a large trough is placed, and which with the steaming apparatus standing between the two last, is inclosed and covered with a shed. Into these hogsheds I throw a small quantity of boiling water, and into the water a small quantity of corn or rye meal, just sufficient, when the cask is filled up with cool soft water, to produce the vinous fermentation, as if going to distill. As soon as the liquid has attained that state, I steam off a turn of the cut stalks, shucks, &c., putting the last into the trough, over which, by means of a portable trough, such as distillers use, I permit the fermented liquid to flow and cover the cut stuff, which has been well pressed down previously in the trough, and held down by a moveable top.—

This done in the evening, the forage becomes perfectly saturated by morning with the liquid, and at once one of the most nutritious and palatable preparations for the cow kind yet discovered. The cut stuff charged with the wash, is deposited in the feeding troughs, taken out of the trough in which they are saturated, in baskets, which carries away no more of the liquid than what is contained in it by absorption. Every particle is consumed by the cattle, care being taken to serve them with the food as they consume it. By a little arrangement I keep my hogsheds so filled, that one is always ready for use. My horses and mules consume this preparation with equal *gout* as the cattle. As a food for my work oxen when laboring, it is, experience convinces me, superior. It "sticks by the ribs"—and plentifully given keeps them in fine plight. The apparent pleasure with which the animals consume this preparation is observable. I know of no food which they eat with more avidity—and what I consider of much advantage to them, especially the cow kind, they soon fill themselves. Satisfied that nature intended that the food of animals should include a variety, and that this being a law of nature, this variety is necessary for the highest state of animal health, I have added to the stalks every vegetable substance that can be subjected to the cutting box, usually given as food, viz: straw of oats, rye, rice, wheat and hay, pea vines, and sweet potato vines cured—and if plenty, any vegetable roots that can be spared from other animals—and in the season, a portion of grass. I am fully satisfied that the gain in keeping my cattle, which I obtain from cutting up their food, is much more than an equivalent for the time and labor bestowed—and that a still greater equivalent is received from the steaming; for it must be remembered, I convert into food a mass of what could not otherwise be made so.

My first essay was with the stalk alone, stripped of blades and shuck. The result was about the same as when the blades and shuck were permitted to go to the trough. The effect produced by this preparation, on milch cows, I have found all that could be desired—and in addition to the foregoing, with plenty of salt, it will be found to produce in the animals a high degree of health.

Now, sir, in answer to some of your excellent correspondents, I will observe that I am compelled to view my plan as the best to convert the corn-stalk into manure: and I view my gain on this score, equally great. My cattle are well littered with pine straw, or oak leaves, &c. The production of my corn-stalks passing through the stomach of animals, affords me the rich means of converting them into the best of manure, to a prodigious amount. Here my gain over the ploughing-in system is, I think, decided and self-evident. Plough in a ton of stalks, and let me carry out of my dungstead what another ton has enabled me to produce, and the result will readily be anticipated. AGRICOLA.

Alabama, March 30, 1835.

FOREIGN ABSTRACT.

Advices from England to the 1st August and from France to the 31st July, both inclusive, have been received.

An attempt has been made to assassinate Louis Phillippe, by means of an infernal machine. The at-

tempt was made on Tuesday, July 28th, during the celebration of the "Three Days." The king accompanied by his three sons, the Duke of Orleans, the Duke of Nemours, and the Prince of Joinville, and a numerous staff were proceeding to review the troops. The Royal cortege quitted the Tuilleries at 9 o'clock, A. M. and on leaving the *Place du Carousal* proceeded by the *Rue Rivoli*, and the *Place Vendome*. The troops or rather a portion of them, were formed in line along both sides of the Boulevard at the head of the *Rue Madelaine*. These troops the king reviewed, and retraced his steps, partially, towards the *Place Vendome*, where the troops were to file off before him.

At twelve o'clock, at the moment the king reached the Boulevard du Temple (a little before the Theatre des Funambules) was heard a dreadful explosion, like irregular platoon firing. The opinion at first was that it was a discharge of fire works, but in a moment the awful and deadly nature of the perpetration became apparent. The cries of the wounded were heard—dreadful confusion ensued—and then, for the first time, the people learned that a shower of balls had been fired at the king and his cortege, from an infernal machine, placed in the front window of a house.

The first and most prominent object was the king, waving his hands to the National Guards and the people, and pointing to his sons, beside him, as if shewing that they had escaped. An aide-camp held up the hat of a marshal of France, the feather stained with blood. This was the hat of Marshal Mortier, Duc de Treviso,—this gallant man (one of Napoleon's warriors) had been instantaneously killed by one of the balls of the infernal machine. The king's arm was grazed by a ball, and he received a contusion on the forehead from a ball; his horse wounded in the neck, but he displayed great coolness, and instantly rode up to the house whence the discharge came. It is curious that had the king occupied his proper place in the procession, it would have been the forfeit life. He did not take the centre of the road, but retained that place, on the side next the troops he had been inspecting. The Duke of Orleans has also a contusion on the left thigh near the knee. A ball struck the hind quarter of the horse of the Prince of Joinville.

Beside the Duc de Treviso, the following were killed:—Gen. de Lachasse de Verigny; Capt. Villate, aide-camp to Marshal Maison; Lieut. Col Riussac, of the 8th Legion; four grenadiers; a Colonel in the army; two citizens; a woman and a child. The wounded were General Heymez, (struck by 5 balls, one of which carried away his nose,) Generals Colbert, Pelet, and Blin; Col. Raffé; Capt. Marion; one citizen, and five women. All of these are not expected to recover. Three or four others are slightly wounded.

The name of the assassin is *Jacques Girard*, aged 39, a resident of *Lodeve*, where he has a family. He is a carlist.

Immediately on the fall of the Duc de Treviso, smoke was seen to issue from the third story of a house, No. 50, on the Boulevard du Temple. The 1st and 2d stories were occupied by a wine merchant. Each story had but one window and a single room. The house was invested and searched. The room in which the infernal ma-

chine was, is only 6 feet by 7. The machine was very strong, and consisted of 25 gun barrels, in a frame, and could be discharged at once. They were so disposed as to be able to strike a man on horseback in the centre of the Boulevard. They were so heavily loaded, that although the barrels were new, five of them had burst.

Although badly wounded it is supposed that the assassin will survive.

The Queen of Portugal is to marry Prince Carignari, a Sardinian sprig of Royalty—his age 22—a glorious age to soothe the agonized heart of a young widow; his principles are liberal: so he is just the gentleman to bind up the broken heart of the young Queen, and gratify the patriot aspirations of her thrice loyal and kind hearted subjects, who, in their love for her, implored her, ere the tears had dried upon her cheeks, to take to her bosom a successor to her dead Lord.

The difference between *Ohio* and *Michigan*, appears to assume a worse and more threatening aspect than ever. The legislative council of Michigan had the subject under consideration on the 25th ultimo, and made an appropriation of \$315,000 to meet any emergency which may arise, and to use the language of the *Detroit Free Press*, of the succeeding day, "every arrangement will be made to afford warm reception to any portion of the million" of Ohio that may visit the borders of Michigan. The paragraph concludes with these pregnant words:

"Michigan defends her soil and her rights, and we would wish our fellow-citizens of Ohio to recollect, that 'thrice is he armed who has his quarrel just.'"

War! War!!—Orders have been issued for volunteers to rendezvous at Mulholland's in the county of Monroe, on the first of September next, for the purpose of resisting the military encroachments of the state of Ohio. The territory it is expected will be on the alert, and we understand services will be accepted from all quarters."

On the other hand, *Ohio* is marshalling her forces, for the coming fray. From the *Xenia Free Press*, we learn that "the inhabitants of the northern counties have manifested a willingness to meet their neighbors of Michigan, in mortal combat.—Many of them have volunteered at the call of the Governor, to march at a moment's warning to the disputed territory.

The Governor has ordered a company of riflemen to be raised in Huron county, to be armed at the expense of the state, to protect the court in Toledo, Lucas county. The term was commence on the 3d inst., Judge Higgins presiding."

From the *Detroit Journal*, of the 5th Sept., we learn that several independent and militia companies were to depart that morning for Toledo, and that several companies had passed through that city on the previous day. A private letter from Detroit of the 3d Sept. states, that the Judges of Wood county, (Ohio) would attempt to hold a court on the following Monday, "that Gov. Lucas of Ohio, was prepared with troops to defend them; that Gov. Mason, of Michigan would make an effort to arrest them, and for doing so the more effectually had ordered 1,200 men to Monroe the next day. Lucas is determined, and Mason, backed by the unanimous feeling of Michigan, dare not attempt to retrace his steps."

These indeed bespeak fearful portents. Is there no men in the powerful state of Ohio—none in the chivalric territory of Michigan, the weight of whose moral character would be sufficient to enable them to play the part of mediators, to stay all angry feelings, or at least suspend all hostile proceedings, until Congress shall have met and had time to act in the premises?

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,		VIRGINIA.	
Branch at Baltimore, . . . do		Farmers Bank of Virginia, . . . do	
Other Branches, do		Bank of Virginia, do	
MARYLAND.		Branch at Fredericksburg, . . do	
Banks in Baltimore, par		Petersburg, do	
Hagerstown, do		Norfolk, do	
Frederick, do		Winchester, do	
Westminster, do		Lynchburg, do	
Farmers' Bank of Mary'd, . . do		Danville, do	
Do. payable at Easton, . . . do		Bank of the Valley, . . . do	
Salisbury, 5 per ct. dis.		Branch at Romney, . . . do	
Cumberland, do		Do. Charlestown, . . . do	
Millington, do		Do. Leesburg, . . . do	
DISTRICT.		Wheeling Banks, do	
Washington, } Banks, 1.		Ohio Banks, generally 3a3	
Georgetown, }		New Jersey Banks gen. 1a2	
Alexandria, }		New York City, 1a2	
PENNSYLVANIA.		New York State, 2a2	
Philadelphia, 1a2		Massachusetts, 2a2	
Chambersburg, 2a2		Connecticut, 2a2	
Gettysburg, do		New Hampshire, 2a2	
Pittsburg, 1a2		Maine, 2a2	
York, 1a2		Rhode Island, 2a2	
Other Pennsylvania Bks. 1a2		North Carolina, 3a4	
Delaware [under \$5], . . . 3a4		South Carolina, 2a3	
Do. [over 5], 1a1		Georgia, 4a5	
Michigan Banks, 5a		New Orleans, do	
Canadian do, 5a			

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.		
BACON, hams, new, Balt. cured, . . .	pound.	11	11½
Shoulders, . . . do,	"	10	
Middlings, . . . do,	"	10	
Assorted, country,	"	9	9½
BUTTER, printed, in lbs. & half lbs.	"	18½	25
Roll,	"		
CIDER,	barrel.		
CALVES, three to six weeks old, . . .	each.	3 00	6 00
Cows, new milch,	"	17 00	30 00
Dry,	"	8 00	12 00
CORN MEAL, for family use,	100lbs.	1 87½	1 94
CHOP RYE,	"	1 62½	1 75
EGGS,	dozen.		
FISH, Shad, No. 1, Susquehanna, . . .	barrel.	7 75	
No. 2,	"	6 75	
Herrings, salted, No. 1,	"	4 25	
Mackerel, No. 3,	"	4 50	
Cod, salted,	cwt.	2 25	2 75
LARD,	pound.	10	10½

CONTENTS OF THIS NUMBER.

Notices of the Silk Manual—of Lime for sale cheap—of the Metropolitan—Prospectus of a Cattle Fair—An hour at Clairmont Nursery—Mr. Blydenburgh's address—Treatment of Milch Cows—Glossary of soils—Account of the Cattle of Wales—Cultivation of Wheat—great importation of improved Short-horns—*Agricola* on saving Corn-stalks, and preparing them as food for cattle—Foreign Abstract—The difference between Ohio and Michigan—Bank Note table, Price Current, &c.—Advertisements.

GRASS SEED.

Fresh ORCHARD GRASS, HERDS and TIMOTHY SEED, just received and for sale at the *Maryland Agricultural Repository*, Light st.

JAMES MOORE,
Successor to SINCLAIR & MOORE.

ag25

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM.	TO.
BEANS, white field,	bushel.	2 50	
CATTLE, on the hoof,	100lbs.	5 00	6 00
CORN, yellow,	bushel.	85	87
White,	"	85	87
COTTON, Virginia,	pound.	18½	
North Carolina,	"		
Upland,	"	18½	20
FEATHERS,	pound.	37	40
FLAXSEED,	bushel.	1 25	1 37½
FLOUR & MEAL—Best wh. wh't fam.	barrel.	7 25	7 75
Do. do. baker's,	"	6 75	7 25
Do. do. Superfine,	"	6 12	6 37
SuperHow. st. in good de'd	"	6 00	
" " wagon price,	"		5 75
City Mills, extra,	"		6 12
Do.	"		6 00
Susquehanna, firm & scarce	"		6 00
Rye,	"		4 75
Kiln-dried Meal, in hhds.	hhd.	19 00	
do. in bbls.	bbl.	4 00	4 25
GRASS SEEDS, red Clover,	bushel.	5 00	5 50
Timothy (herds of the north)	"	2 75	3 25
Orchard,	"	1 50	2 50
Tall meadow Oat,	"	2 00	2 50
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.		15 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
Hogs, on the hoof,	100lb.	7 00	7 25
Slaughtered,	"		
Hops—first sort,	pound.	12½	
second,	"	10	
refuse,	"	8	
LIME,	bushel.	33	35
MUSTARD SEED, Domestic,	"	5 00	6 00
OATS,	"	32	34
PEAS, red eye,	bushel.		
Black eye,	"		1 25
Lady,	"		
PLASTER PARIS, in the stone,	ton.		3 50
Ground,	barrel.	1 25	
PALMA CHRISTA BEAN,	bushel.	2 00	
RAGE,	pound.	3	4
RYE,	bushel.	70	73
Susquehanna,	"	none	
TOBACCO, crop, common,	100 lbs	4 50	5 00
" brown and red,	"	5 00	7 00
" fine red,	"	7 00	9 00
" wrappery, suitable	"		
for segars,	"	5 00	10 00
" yellow and red,	"	8 00	12 00
" yellow,	"	9 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	4 00	
" ground leaf,	"	5 00	8 00
Virginia,	"	5 00	10 00
Rappahannock,	"		
Kentucky,	"	8 00	14 00
WHEAT, white,	bushel.	1 25	1 30
Red,	"	1 15	1 24
WHISKEY, 1st pf. in bbls.	gallon.	37	37½
" in hhds.	"	36	dull
" wagon price,	"	33	33½
WAGON FREIGHTS, to Pittsburgh, . . .	100 lbs	1 50	
To Wheeling,	"	1 75	
WOOL, Prime & Saxon Fleeces,	pound.	62 to 75	32 to 34
Full Merino,	"	52	62 30 32
Three fourths Merino,	"	47	52 28 30
One half do.	"	42	47 26 28
Common & one fourth Meri.	"	38	42 25 25
Pulled,	"	38	42 26 28

VALUABLE STOCK FOR SALE.

A FULL-BRED Durham short horn yearling BULL, a very superior animal; a 7-8 blood, same age; also two COWS, 4 years old, 3-4 blood, in calf by a full-bred Bull. Pedigrees given in full. Applications for any of the above cattle to be made to the Editor of the Farmer and Gardener, by whom the terms will be made known. Letters from a distance must be post paid. June 30th.

AGRICULTURAL AGENCY IN PHILADELPHIA.

IRVINE HITCHCOCK, late proprietor of the American Farmer Establishment, Baltimore, having sold that concern, has removed to Philadelphia and established himself as an Agent for the purchase and sale on commission, of choice Live Stock, Seed Grain, Grass Seed, Fruit and Ornamental Trees, and other productions of the Nursery and Garden, Agricultural Implements and Books, and in fine, of all articles and commodities in the farming and gardening line.

He hopes that his experience in this business, the fidelity and promptness with which he has heretofore executed orders, together with his extensive acquaintance and correspondence with the most eminent stock breeders, farmers, nurserymen and gardeners in the Union, will be deemed sufficient guarantees that all business entrusted to him will be both ably and faithfully performed; and that the eligibility of this city as a point, between which and almost every other important place in the Union, transportation, either by land or water, is exceedingly convenient and cheap, will operate as an inducement with those requiring such services to send him their orders.

It is expected that letters when unaccompanied by a remittance or a positive order, will be post paid.

Office at No. 223 Arch street, between 6th & 7th sts. On sale now, a variety of Cattle of the improved Durham Short Horn breed, several of which are *Herd book* animals.

Also, Cattle of desirable descriptions, of pure blooded Devonshire stock.

Also, a supply of the best **NORTHERN MILCH COWS**, selected by an experienced Dairyman and breeder, without regard to blood or pedigree, but solely on account of their superiority as **DEEP MILKERS**.

Also, Bucks and Ewes of the most approved breeds of both long woolled and fine woolled sheep.

Also, several Jacks and Jennies, some of them of very superior size and character as breeders.

I. H. also expects to receive shortly a few bushels of the celebrated **S. (RT or shot) WHEAT** and a supply of **GAMA GRASS SEED**, and of **SK NLESS OATS**. Also the best of White Mulberry Seed and Silk Worm Eggs. The white Mulberry tree from one to three years old, and the *Morus Multicaulis*, or New Chinese Mulberry, will be supplied at moderate prices in the proper season.

Grass and Clover seeds of the best quality can be furnished at short notice and at moderate prices.

se 15 Jan 31

GOOD AND CHEAP MANURE.

THE Subscribers offer for sale 5000 bushels of plaister of old buildings. Recommended by Sir Humphrey Davy as a most valuable manure, particularly for clayey or stiff soils—containing much carbonic acid, acting immediately and assisted in its action by the sand with which it is mixed.

Price 4 cents per bushel or \$1 for every two horse cart load.

sep 8

SINCLAIR & MOORE.

NOTICE TO CAPITALISTS.

THE undersigned having been engaged for a number of years past in the Linnean Garden & Nurseries at this place, in a department where he has had every opportunity of becoming thoroughly acquainted with the business, wishes to form a connection with some person of capital, either as active or silent partner, for the purpose of carrying on the *Nursery & Garden Seed business*. To a person wishing to engage in a lucrative business, it is an opportunity rarely to be met with. Any communications addressed to the subscriber, will be treated as strictly confidential.

G. R. GARRETSON.

Flushing, L. I.—Sept. 1st, 1835. sep 8

OYSTER SHELL LIME.

ORDERS for any amount of the above valuable article will be received and promptly filled if left at this office. The incalculable value of lime as a manure is so well known that it is needless to dwell upon it in this advertisement. It will be delivered at any convenient landing place on the Chesapeake bay or its tributary waters, which may not be more than 70 miles distant from *Worton Creek, Kent county*, at 8 cents per bushel. Unburnt shells delivered at 4 1/2 cts. per bushel.

se 8

50 BUSHELS OF LUCKWHEAT, suitable for seed, just received and for sale. Apply to **SINCLAIR & MOORE.**

June 1836.

THE SUBSCRIBER offers for sale at the *Maryland Agricultural Repository, Light street*, a large and general assortment of

PLOUGHS.

The Self-Sharpening Plough possesses the advantage of having a moveable steel point, from fifteen to twenty-four inches long, which can be reversed, as a bevel is formed by wearing, and advanced as it becomes shorter, so as to bring into actual wear from twelve to eighteen inches of solid wrought bar; by thus changing the point, the share continues to perform its work well until worn off nearly up to the mould board; whereas, without this moveable point, shares are generally rendered useless when only half worn.

This valuable principle may be applied to any shape of mould board.

SELF-SHARPENING.

- | | |
|---|--------------|
| No. 00. The smallest size is a 7 inch seed and cultivating plough | price \$5 00 |
| No. 0. A one-horse cultivating plough, 8 inches wide, nearly the same length as the smaller one, but has a bolder mould board, and better adapted to sandy lands. The shares and heels of these two sizes suit each other | 5 25 |
| No. 1. A light two-horse | 6 25 |
| " 2. A two horse plough, 9 inches wide | 7 00 |
| " 3. A two-horse flushing plough | 8 00 |
| " 4. A heavy three-horse plough with sword coulter | 12 00 |

WOOD'S PATENT.

- | | |
|--|------|
| No. 21. A seed and cultivating plough, 8 inches wide, with cast share | 5 00 |
| Corn. A one-horse plough, with wrought iron standard and cast share | 5 50 |
| No. 1. A. Is a light two-horse plough, 9 inches wide | 6 50 |
| " 1 1/2. A two-horse plough, with sword coulter and cast share, a superior flushing plough | 8 00 |

The above ploughs of Wood's Patent are entitled to two extra shares each, at the above prices.

SINCLAIR & MOORE'S IMPROVED.

- | | |
|---|-------|
| 6 inch. A superior seed plough, with cast shares | 4 50 |
| 7 " A one-horse ditto ditto | 5 00 |
| 8 inch. A light two-horse plough, with cast shares | 5 50 |
| 9 " A two-horse ditto ditto | 7 00 |
| 10 " A two or light three-horse plough, with sword coulter and cast share | 9 50 |
| 10 " A three-horse plough with wrought share | 10 00 |
| 10 " A three-horse plough with sword coulter, a superior flushing plough, made both right and left handed | 11 50 |
| 12 " A heavy three-horse plough, with sword coulter | 14 00 |

M'CORMICK'S PATENT.

- | | |
|---|-------|
| 7 inch. One-horse wrought shared plough | 5 00 |
| 8 " Light two-horse ditto ditto | 7 00 |
| 9 " Two-horse plough, with sword coulter | 9 50 |
| 10 " Three-horse plough, with coulter | 11 50 |
| 12 " Heavy three horse plough, with coulter | 14 00 |

BAR SHARE

- | | |
|--|-------|
| No. 1. Is a 7 inch plough, with wrought share and lock coulter | 6 25 |
| " " Is a 7 inch plough, without coulter | 5 00 |
| " 1 1/2 A one-horse plough, with wrought share and coulter | 7 00 |
| " 2. A light two-horse plough, with wrought share and coulter | 8 00 |
| " 3. A two-horse plough, with wrought share and coulter | 9 50 |
| " 3 1/2. A heavy two-horse plough, with wrought share and coulter | 10 00 |
| " 5. A heavy three-horse flushing plough, with wrought share and coulter | 13 00 |

BILL SIDE.

A plough suited to two horses, with cast share, charges with ease, so as to throw the furrow to the right or left

SHOVEL-PLOUGH.

Wrought shares

CARY-PLOUGH.

- | | |
|--|------|
| No. 1. A one-horse plough, having nearly the form of mould board as the well known Cary or Dagon plough, but has a cast iron mould board and wrought share. The mould board is bold, opens a wide furrow, does clean work, and is very | 4 50 |
|--|------|

strong and simple in its construction

No. 2. A light two horse plough of the same construction.

BUFFALO PLOUGH.

- | | |
|--|------|
| No. 1. H. A one-horse plough, with cast share | 5 00 |
| No. 1 1/2 H. A two-horse plough, with cast share | 8 00 |
| " 2. H. Heavy two-horse ditto, | 9 00 |

The form of the mould board of these improved ploughs, is somewhat on the principle laid down by *Thos* as *Jefferson*, but varied so as to equalize the pressure on the mould board, as observation in the practical use has directed.

DOUBLE MOULD BOARD.

Two sizes; a very useful plough for cultivating potatoes, &c. and for ploughing up potatoes at the time for gathering the crop. Price \$7 00 to 10 00

EXTRA CASTINGS FOR PLOUGHS.

Together with several new patterns, which will be sold low.

CULTIVATORS.

- | | |
|---|-------------------|
| Those with five wrought tines, of the most approved shape | 5 25 |
| Five tines, of more simple form | 5 00 |
| Cast tined | from 3 50 to 4 00 |

If made to expand, 50 cents additional.

WHEAT FANS.

- | | |
|--------------------------------|------------------|
| Improved | \$24 00 to 25 00 |
| Ditto extra large | 28 00 |
| Ditto ditto recent improvement | 33 00 |
| Common Fans | 19 00 |
| Box Fans, small size | 15 00 |

STRAW CUTTERS.

- | | |
|---|-------|
| 20 inch. Cylindrical straw cutter, suited to horse or water power, capable of cutting from 75 to 100 bushels per hour | 75 00 |
| Extra knives per set | 6 00 |
| 14 " Box same construction, suited to manual power | 45 00 |
| Extra knives per set | 5 00 |
| 11 " Box | 27 00 |
| Extra knives per set | 4 00 |

These machines are self feeders, the knives are of spiral form, and act on the bed steel in such a manner as to cut with great ease without a very keen edge; many thousand bushels have been cut with them without sharpening the knives.

Common Dutch straw cutter with treadle

Ditto without treadle

CORN SHELLERS.

Of the various kinds offered to the public, the one generally preferred is that with a vertical iron wheel with spring holders, which adapt themselves to any sized ears. There is no machine more certain to answer the intended purpose; they are very durable and easily kept in order, and will shell from 15 to 20 bushels per hour by hand, and are now sold at the reduced price of \$19 00, with a discount of five per cent. if cash be paid.

JAMES MOORE,

Sept. 1 Successor to SINCLAIR & MOORE.

DURHAM STOCK.

A gentleman about to emigrate to the South, will dispose of three superior animals of the improved *Durham Short Horn* breed, the one a bull rising 4 years old, a cow between 9 and 10 years old, and her bull calf 3 months old on the 1st September, instant. The bull was raised by Dr. Pool, of *New Brunswick, Maine*, got by imported thorough-bred Bishop, by Wellington—out of a thorough-bred imported cow, called *Maria*; the cow is imported, and is a beautiful animal, having every mark and point of a thorough-bred, her colour white ground with red flecks and spots; she has given from 6 to 8 gallons of milk per day. Her calf now three months old, is also a most beautiful animal, partaking of the marks and points of his mother; he was got by the first named Bull.

As the owner is anxious to sell, a bargain may be had on early application.

Letters concerning the above cattle, post paid, directed to the editor of this paper will be promptly attended to.

DEVON BULLS.

FOR SALE—Two full blood Devon Bulls. The first is a beautiful animal, 9 years old, of the purest blood and fine form, raised by one of the first breeders in the country; the other is a fine young animal, 1 year old, got by the above out of a first rate Devon Cow. These animals will be sold on reasonable terms, their superior qualities being considered. Enquire of the Editor.

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THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 21.

BALTIMORE, MD. SEPTEMBER 22, 1835.

Vol. II

THIS publication is the *successor* of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, SEPT. 22, 1835.

SILK MANUAL.

The proprietors of the *Farmer and Gardener*, Baltimore, have in the press, and will speedily publish, a *complete Manual of the Mulberry and Silk Culture*, compiled from the best and most authentic sources. As the object is the promotion of a great public interest, the cost will be moderate.

SPICED TOMATOES.

As this is the season for securing a supply of this healthful vegetable, we commend to all housekeepers to put up some after the following recipe. By so doing they may preserve them perfectly good until tomatoes come again.

RECIPE FOR A BUSHEL OF TOMATOES.

Take your tomatoes and pour boiling water over them, skin them: then *boil them well*, after which add a teacupful of salt, a table spoonful of black pepper, one do. of cayenne, an ounce of cloves, an ounce of cinnamon, and an ounce of mace, mix well, and put the tomatoes into *small jars*, run mutton suet over them and tie them up, either with strong blue paper or buckskin. Prepared in this way they will keep a year.

The communications of Mr. *Schmoldt* on the culture of *Mangel Wurzel*, and the treatment of *Hoven Cattle*, will commend themselves to the reader. The instrument used in Germany for perforating the diseased animal, appears to us to possess great merit, and to be well calculated to increase the certainty of relief, by its protracted efficiency in the discharge of all subsequent accumulations of gas.

We give to-day another essay from our able and always acceptable correspondent, *Agricola*. He has chosen a subject of growing interest in our country, and treated it with his usual skill and good sense.

Our highly valued correspondent, Col. *Thos. Hillen*, has favored us with a communication detailing his successful experiments in the extirpation of Garlic, which will be found in another column, and will doubtless prove acceptable to our readers. The high standing of Col. Hillen, as an enlightened practical farmer, gives to his method of destroying this pest, enhanced value.

The request which he makes, that some of our agricultural readers will favor him with a plan for killing the *Carolina Pink*, *Wild Carrot* and *Blue Thistle*, we hope will meet with attention.

In discharging our part of the obligation, we would say that strong *fish or meat brine*, or salt if applied in sufficient quantities, would, we doubt not, kill these vegetable nuisances as dead as Anthony's nose, which is dead enough in all conscience. If those weeds were cut while in blossom, and ploughed up late in the fall or early in the winter—that is as regards ploughing—if these were treated as the *Colonel* treated his enemy, the Garlic, we do not doubt that he would succeed in ejecting them from his soil. The mulic acid of the apple pumice would destroy them; but pumice cannot be procured in sufficient quantities to go over much ground in a season.

INARCHING.—Dr. *Hales* mentions a very curious experiment which he made. He attached the eastern branch of a young tree to its neighbor by inarching, and its western branch to another neighbor in the same manner, and after they were united, he cut the stem of the middle tree from its roots, and thus left it hanging in the air by its two inarched arms, where it flourished with considerable vigor.

CHINESE MULBERRY.

Arrangements are about being made, we understand, for the formation of a company of gentlemen, to prosecute the Silk business in this state. A few pounds of the Chinese Mulberry seed, an article which it is sometimes difficult to obtain, will be required. Any person having seed of this kind to dispose of, may facilitate its sale by leaving information with the proprietors of this paper. —*Philadelphia Sat. Eveg. Post.*

We find the preceding marked for our notice in the above paper, and we take this occasion to observe, that we rejoice sincerely at the pleasing intelligence it contains. The formation of companies for the promotion of great undertakings, in

the incipient stages of such enterprises, never fail to stimulate individual exertion. With respect to the seed of the *Morus Multicaulis*, we fear the contemplated company will find difficulty in obtaining it in this country. Thus far, this tree has been chiefly propagated from layers, cuttings, buds, &c., and such has been the demand for the plants in the eastern states that we understand it has greatly exceeded the supply. The senior proprietor of this establishment has upwards of *two thousand trees* from 6 to 8 feet high, undisposed of, which are now in a most promising condition; but how long they may be unsold, we cannot say, as the inquiries concerning them are of daily occurrence.

We are also highly gratified to be able to state that the most lively interest has been awakened to the Mulberry culture in almost every direction. We hear daily of the formation of companies for that object, as well as of individuals embarking in it. We conversed with one of the most intelligent and patriotic gentlemen in Frederick county, of this state, a few days since, who intends putting twenty acres in the culture immediately, with a view ultimately of connecting a silk weaving establishment with it. We wish him success from the bottom of our heart, and we doubt not that his patriotic example will excite a spirit of emulation among his neighbors, which will not only prove eminently useful to themselves, but whose influence will remain through all time, as the proudest monument, which his ambition could desire, of his worth and public spirit. The warrior who gains honors, does so at the expense of human life, and necessarily entails remorse upon the possessor—but the tiller of the earth, who breaks through ancient prejudices, and establishes a new and beneficial branch of husbandry, weaves for himself a garland which will endure while the world exists; for it will be nurtured by human happiness, and receive its sources of life from the best and most enduring affections of the heart.

STANDARD WEIGHT OF POTATOES AND OATS.

In *Maine*, the legislature have, by law, regulated the weight of the bushel, both of Potatoes and Oats:—the bushel of potatoes is fixed at 64 pounds, and that of oats at 35 pounds. Eastern agriculturists sometimes make their statements of vegetable productions by the hundred weight, and as we presume the standard of *Maine*, is that of

other states in that quarter, our readers in the middle, southern, and western states, who are in the habit of calculating by the bushel, will be able to comprehend what is meant by pounds of oats or potatoes, in quantity.

SOUTHERN CROPS.

The Fayetteville Journal says:—

The Corn Crops—The Fayetteville Journal of the 2d inst. says—"Seldom, if ever, have our farmers had the promise of a more abundant Corn crop than the present year. From every region of the country, so far as our information or observation has extended, we have the gratifying assurance that the husbandman will meet with a rich reward for his labors."

From a letter in the *Charleston Mercury*, dated *Barnwell*, Carolina, Sept. 5, we learn that owing to a long and destructive drought, the rust was doing great injury to the cotton crop in that district, and the writer is satisfied it will fall far short of that last year. The *Corn* crops are fine, and the blades saved with scarcely a drop of rain to wet them.

We find also in the same paper dated *Carloville*, Alabama, Sept. 1st, which says:—

"Every body says, that this has been the worst season for Cotton they had ever known, except in the thirsty sandy land. The crops will no doubt fall short of our early expectations."

The editor of the *Salem, N C. Reporter* says, that a more abundant yield of apples he has never seen, than that of the present year, in North Carolina.

The *Augusta Georgia Constitutionalist* of the 11th Sept. says:

New Cotton.—Since our last, up to yesterday, 2 o'clock, there was received in this market, seventy-nine bales of cotton of the new crop, nearly all of which has been sold at prices ranging from 17½ to 18½ cents; principally at 18 cents; altogether there have been received so far this season, only 112 bales of the new crop.

The first bale of new cotton received in *Columbus*, Georgia, reached that market on the 29th ult. from the plantation of Mr. John Woolfolk, and sold at 25 cents per pound.

The *Tennessee Farmer* says that the *Corn* crop, generally speaking, in that section of the country, (*Jonesborough*) is more unpromising than has been witnessed for many years past.

Extract of a letter from a gentleman in *Scriven County*, Geo. dated Sept. 4th.

"The cotton crops here are very poor, not more than half a crop. Provision crops good."

FROM THE WEST.

Crops in Kentucky.—The Crops of Corn, Hemp, Potatoes, Turnips, &c. are heavier and more abundant, than, perhaps taken altogether, we have ever had before in Kentucky at one season. Our stock is equally abundant and fine—and scarcely a day passes that we do not see droves of horses and mules driven from the State, to dis-

tant markets. Lands and all productions bear a good price.

B. Warfield, Esquire, near Lexington, sold a few days ago, his yearling Bull Calf, *Chieftain*, by Pontiac, dam May Daere, to Mr. Geo. D. Hayworth of Ohio, for \$300.

Rice raised in Maryland.—The Cambridge, (Md.) Chronicle, says the crop of rice planted by Major LEARY, near that place, has grown vigorously and matured completely.

Erratum—In the account of our last visit to Mr. Sinclair's, for "yellow mulberry," read "yellow locust."

FATTENING OF CALVES.

Veal is either among the best or most indifferent of meats. If the calf be well fattened and bled during the process of fattening, it is certainly one of the most delicious viands that can be brought to the table; but if neglected—if robbed, as is mostly the case, of half its milk, and not given any additional food, it is when slaughtered as juiceless as it is possible to imagine any thing to be, unsavory in its flavor and revolting to the sight. Such being the case, the fattening of calves intended for the butcher becomes a matter of serious inquiry, and as the farmer should always consult economy in all he does, a cheap way of making good veal will, as it ought, be considered the best.

A calf intended for veal, then, should be suckled regularly three times a day, at regular hours. In addition to its mother's milk it should have between the intervals of suckling, messes of corn meal gruel, and boiled skimmed milk, say from a quart to three pints a day for the first three weeks, the quantity to be increased as the calf approaches nearer and nearer the period of slaughtering, to from three quarts to a gallon. He should not be killed earlier than when he is six weeks old. If the calf should refuse to drink the gruel and milk, it should be given him by force. This can be easily effected. Fill a strong black glass bottle with the mixture, hold up his head, insert the neck of the bottle into his mouth, and smooth your hand over his wind-pipe to encourage his swallowing.

A gruel made of half an ounce of flaxseed flour may be substituted for that of the corn meal about thrice a week. This latter preparation has a most salutary effect; besides being highly nutritious and tending to increase the fat of the animal, it improves the complexion of the hair and loosens the hide.

For about ten days before the calf is killed, he should be given force-balls daily. They are comprised simply of Indian corn meal and eggs beat-

en up together and softened a little with milk.—Two eggs and as much flour as they will make up, with a small quantity of milk, is enough for each daily allowance.

A lump of chalk if placed in a box convenient for the calf to lick, will be found to correct the acidities of his stomach, and prevent scouring.

If in winter, the calf should be tied up in a dry warm place, and if in summer, in a dry, cool place, where he will not be annoyed with flies; his stall must be kept well cleaned and have plenty of fresh straw, hay or leaves to lie upon.

To the editor of the *Farmer & Gardener of Baltimore*.

Dear Sir—I was gratified through the politeness of a friend with a few numbers of your periodical; the perusal of them produced the wish to conduct in some way to your new undertaking; for that reason I send you two short essays to your own disposition. I beg leave to mention that I was formerly a practical farmer in the fertile low lands near the River Elbe, in the kingdom of Hanover, and during a residence of seven years in America, I have not lost sight of this my favourite employment, although I have not been engaged in it.* The chief production of my native country, is *rape* or *cole seed*, which yields the greatest profit to the farmer; I often wondered why this is not more extensively cultivated in Pennsylvania, for as much as I can ascertain, but little attention is given to it; if you will be so kind as to favour me with your esteemed answer, I would feel myself particularly obliged in getting some information concerning its cultivation in the other states of the union.

The cultivation of *Poppy* is, according to my opinion, not less advantageous, since its oil is considered the best substitute for olive oil.†

With assurance of esteem,
your most devoted, &c.

JOHN SCHMOLDT.

* I have been engaged here in the coal trade.

[† Our correspondent, we presume, has never tasted the oil expressed from the *sun-flower*, or he would not talk of that from the *poppy* being the best substitute for olive oil.]—Ed. F. & G.

MANGEL WURZEL.

On the cultivation of Beets (which probably is intended for mangel wurtzel, occasioned through a paragraph on this root in the first number of the *Farmer & Gardener of 1835*.)

Well acquainted by experience with the cultivation of this estimable root, I concur in saying that it is of the utmost advantage to the farmer, but it is erroneous to ascribe to the leaves such alimental qualities as mentioned in the above paragraph, although I do not dispute them to be an excellent food for cattle. But I would principally warn the farmer for the too early plucking of the leaves, for it is only done, as I know by experience as by comparative trials of others, to the great detriment of the root, therefore it should not be done before fall, when the root is fully grown; and then only the want of food can ex-

cuse an earlier plucking, even were it not detrimental to the roots, since it is too toilsome, and on that account, too costly.

I quote, in confirmation of the above, two trials made on some farms in the kingdom of Hanover. At Weende a square rod of roots which partly were earlier deprived of their leaves, produced 117½ lbs. and another unplucked produced 157 lbs. At Reinoldshausen a square rod deprived of their leaves produced 215½ lbs. and another unplucked 232½ lbs.

Upon its produce and the question what distance they must be planted, the following experiment made by myself in 1832, will, perhaps, not be without some interest.

a—Beets planted at a distance of 1 foot square, produced an average 12 oz. the piece.
 b—those do do 1½ 2 lb. 8 oz.
 c—those do do 2 4 lb. 12 oz.
 This will give to the square rod to a) 192 lbs.
 to b) 285 lbs.
 to c) 304½ lbs.

The soil must not be too sandy; and what belongs to its fertility there cannot be done too much to ensure the same; a soil which is well calculated for the cultivation of cabbage, is also well adapted for these beets. Great care is to be taken for the preservation of the roots during the winter, since they are very easily affected by the frost, and if they are heaped too high, and lay too warm and damp, they are subject to spoil, therefore I would not consider them easy to be kept safely for 8 months.

The roots get a great start and grow much larger, if they are not transplanted, but where the seed is laid exactly in the place which the plants have to occupy. But it becomes then an absolute necessity to make use of a piece of land which is entirely free of weeds, since in the contrary, they will overgrow the roots, and will require a great deal of labour to free them of the weeds.

The nourishing qualities of the mangel wurzel compared to good meadow hay, is about as 45 to 10. Hence it is easily to be seen that from 40 to 50 lbs. daily are not sufficient for the fattening of a bullock, they also do not agree with the cattle when given in too great quantities and for too long a time, since they weaken the digestive faculties, and create an aversion towards them. Besides a certain quantity of hay and straw, which is always to be given with them, it is very advisable to add a portion of other roots, for instance, potatoes, or carrots.

That which I have said concerning the mangel wurzel, is intended to remove some errors, but on no account to diminish the value and the advantages of their cultivation;

J. SCHMOLDT.

HOVEN IN CATTLE.

I beg leave to add here some observations to the paragraph in 3d number of the Farmer & Gardener, headed, On the swelling of cattle.

They also in Germany make use of the knife in this disease; but in a less dangerous way, and with better success. It is done with an instrument, called the *Troicar*, a thin and sharp pointed iron in its scabbard, which is pushed into the noted place, then the iron is withdrawn, but the scabbard remains in the wound, for the escape of

the gas; it may even be kept there for some time to prevent the new formation of the gas, this is the great advantage of the iron over the knife, on account of the immediate contraction of the wound, following the use of the knife.

Another well approved means, which is accompanied by no danger, and which every farmer may easily prepare and provide for use, is the following: Take a few crude lime stones and burn them, then pound them while they are glowing hot, and put the flour, before it can be impregnated with the air-gas, into a bottle, and cork it well to prevent the communication of the external air to the lime. In case of a swelling, put a teaspoonful of the same into a bottle with a pint of warm water, shake it and give it to the sick animal, which immediately will be restored. This means is based upon chemical principles in absorbing the fixed air, (the gas) by the alkalies.

JOHN SCHMOLDT.

Pottsville, Aug. 21st, 1835.

[For the Farmer and Gardener.]

SHEEP HUSBANDRY.

Mr. Editor—In your valuable "Farmer" for June 2d, I notice a few remarks on "wintering sheep." The importance of this animal as regards *flesh*, and *fleece* to our comforts, is proverbial, and consequently, merits a full share of attention to its support, as well as propagation.

I have tried some ten or twelve different modes of supporting this animal, in a climate, peculiarly inviting the rearing of sheep. Where it can possibly be had, *green rye* ought to be secured, to allow them, if but a few mouthfuls per day, particularly at lambing time; but at all times, it appears to be singularly effectual, in preserving a high state of animal health. A few *turnips* thrown to them every day is essential to produce the same effect. To these oats may be added, *cut just before they are perfectly ripe*, and housed, without getting wet. But sir, in the south a much more economical preparation can be readily had—superior in quantity and quality, per acre, to the best clover field. After the oats is taken from the field, turn over the stubble on the cow or tory peas, sow about half a bushel to the acre. In a common season, about the time the peas are ready for curing, by pulling up the vines, and thus saving peas and vines together, it will be found that the *crab grass* will be, not only high enough to cut, but so far in seed, as to furnish a rich hay. Cut then the whole with scythes, and cure as hay, *salting well* while stacking. Submit this food to the cutting box, feed in troughs, and mix it, *half and half*, with the *oats* cut off the ground, the same season, cut up also. Add to this, five turnips per day for each sheep, if the turnips are small, and three if large, or *Ruta Baga*. The fondness of the sheep for the *pea*, is well known. The strength or nutritive quality of the vine and leaf, when properly saved as fodder, is equally known to southern planters. Salt well, of course, and let *tar* be in the bottom of the salt trough:—a little pulverized tobacco once a week with the salt, permitting the sheep to ramble through an adjacent woodland, particularly, if *hilly*, about half the day, in good weather. Sheds for them of course in bad. On trial of this plan it will be acknowledged that the number one

acre will support, in high health and fleece, will meet the expectations of the most perfect economist. Like all other animals a state of costiveness is inimical to animal health, but in the sheep, this is readily prevented, by either *rye* or *turnip*. The *pea* agrees well, in every particular with that animal. *Rye-straw* saved well, and cut before ripe, is superior to oats straw. *Barley straw* is excellent, and *rice straw* superior:—and will be found a substitute for the oats, if the *turnip* is added. A small barley or rye lot, will give the requisite quantity to secure the highest health, of one hundred sheep. Thirty minutes per day, if the turnips are added, will be sufficient. The quantity of green vegetable food, taken in during this short period, with the above quantity of turnips, will secure a healthy fermentation in the stomach of the dry food, secure a high degree of health in the animal, and of course, *flesh* and *fleece*. By a little attention to *littering* with dry litter, on dry ground, a quantity of superior manure may be secured. To save the urine the pen ought to be laid with dry earth, previous to penning, removing it at proper intervals.

AGRICOLA.

Woodlands, Alabama, July 22d, 1835.

DESTRUCTION OF GARLIC.

To the Editor of the Farmer and Gardener:—

SIR—Some time ago, I promised to give you a history of my experience and progress in the extirpation of garlic, which promise I shall now attempt to perform.

The first appearance of garlic on my farm, I think, was between 50 and 60 years ago. My father, who was then living, used every means in his power to eject the unwelcome tenant from the premises, but every effort appeared fruitless; as we occasionally tended the field, it spread still wider and wider. Giving up all hope of subduing it, after taking out a great deal every year, and finding it still continued to enlarge its bounds, we, in order to prevent its taking possession of the whole field, laid off a cut of about six or seven acres in the corner of the field which it occupied, and let it run, as well as I remember, for several years unmolested—stacking the grain—treading it out, and feeding the straw on the foul premises.

After the death of my father, (in 1801,) I adopted the mode of fall ploughing for my spring crops, and without anticipating any beneficial results, farther than that of loosening and pulverizing the ground, I flushed up this foul spot for oats in the spring, rather shallow, (as old fashioned ploughing.) When the oats were, I think, about knee high, a friend walked out with me, to look at them, and to my pleasing astonishment, there were but very few heads of garlic to be seen. I then began to reflect what could be the cause, and remembered that the ground was ploughed up very late in the fall, or early in the winter, and consequently, all the germinating power of the exposed garlic, was killed by the frost, before it had time to dry by the sun or air. I am of opinion that a bunch of garlic might be pulled up in the month of June or July, and laid upon a stump to dry until November, and if then planted, that it would grow again; but let it freeze while the pulp is in it, and its vegetating property will be completely destroyed.

Having thus by mere accident, so nearly gained a victory over my invading enemy, I again commenced the attack by carefully taking it up every spring, and so far succeeded, that about ten or twelve years ago, I had four cradles running in the whole field, including that foul cut, and offered a *fippenny-bit* for every head that the reapers should find, and my leader alone found one.

However, we still continue to look out for it every spring, and sometimes find a few heads, which I think are probably dropt by our horses after being fed abroad with foul oats.

At a farm I lately purchased there was a field very full of garlic; I conceived an additional plan of teasing and making a "demonstration" on the enemy, to wit:—I broke it up of moderate depth about the first of December, and was determined as soon as there came one freezing night upon it, after ploughing and a thaw, to run a sharp toothed harrow over it again, and so alternately after every freezing and thawing spell during the winter, in order to turn it up, and expose it to the frost as often as I could, but the winter was very unfavorable to such an enterprise, being in the forepart covered with snow, and in the latter part, continually frozen. I did not go over the field myself in the spring; but my manager told me, that there was an abundance of garlic on the top of the ground, as *soft as mush*, and when cutting the oats at harvest, altho' there was a considerable quantity which had escaped, my manager says, he is certain there would have been *ten times* as much had it not been for winter treatment. Having thus given my history on the *culture of garlic*, if you or any of your readers will in return, instruct me how to repel those *mobs of mischief*, *Carolina pink*, *wild carrots*, and the *blue thistle*, which are now commencing their attacks of violence, your account will stand equally balanced, with that of your friend and humble servant,

THOMAS HILLEN.

SHORT WHEAT—A NEW VARIETY OF THE WHITE.

Philadelphia, Sept. 15th, 1835.

To the Editor of the Farmer and Gardener:—

SIR—You may recollect that last year there was a newspaper report, originating somewhere in Western Pennsylvania, that a new kind of wheat called "*Short Wheat*," of a very remarkable character for productiveness, had been brought into this country, and that seed could be had in Baltimore. So deep an interest was excited, in regard to this grain, and so unanimous were the calls on me for it, that I took considerable pains to ascertain the truth of the report, and finally came to the conclusion that it was a mere hoax, so stated in the Farmer and Gardener at the time. A few days ago however, I received a letter from a German gentleman, in the interior of this State, in which he informs me, that in May 1834, he obtained in New York from a Polish emigrant, then just arrived there, with whom he fell casually in company, about a bushel of very beautiful wheat; that the peasant's account of it was so extraordinary, that the gentleman paid him a very high price for it, and took it home with him to Pennsylvania; and without imparting to more than two or three individuals, the singular

account which he had received of the grain, he sowed it last fall and has now the satisfaction of finding in his crops a confirmation of most that was told him concerning it. I will give you his own account of it from the letter before me.

"It is called in Poland by a name that signifies *Short Wheat*, (mistaken by my imperfect pronunciation, I suppose for *Shot Wheat*), and is there valued very highly for its unrivalled beauty—its abundant yield—great produce of flour, and capacity to withstand adverse seasons. All these properties have been strikingly exhibited in my recent crop; for while all the wheat in my neighborhood, and two other kinds on my own farm, have been seriously affected by the winter and the insect, this has not suffered in the least from either of these causes, and its yield is nearly twice as great as any other kind within my knowledge. I sowed it on a little more than half an acre of good land, just as I did my other wheat, and reaped it at the same time. The grain is beautifully white—the berry rather short and very plump, (whence it derives its name,) and it weighs 64½ lbs. per bushel. I send you a sample of it by the bearer of this. I consider it an important acquisition to this state and to the country at large, and desire that it should be widely disseminated; and believing that your extensive acquaintance with agriculturists in all parts of the country, would enable you to do this more effectually than I can, and desirous also of patronizing your 'Agricultural Agency in Philadelphia,' to which I wish complete success, I avail myself of your offer to dispose of the few bushels I have to spare this season, as soon as I can prepare it for market. Should I be fortunate with another crop, I shall be able to supply you more abundantly."

Having accorded to the writer's request, I expect soon to receive a few bushels which will be disposed of to farmers in moderate quantities. I send you a small sample, being part of the specimen accompanying the letter above quoted.

I have also ordered and shall soon receive from G. H. Holden, Esq. at the mouth of Genesee river, N. Y., a few bushels of his celebrated clean seed wheat of various kinds, which was noticed with strong commendation last year by the editor of the Cultivator. I shall shortly make an extract from letters of his in my possession, on the subject of wheat, and send it you for publication, if you approve of it.

Your friend, respectfully,

I. I. HITCHCOCK.

The Editor of the Farmer and Gardener has a small parcel of the above wheat, and he but expresses his opinion, when he says, that it is incomparably the most beautiful specimen of the wheat family he has ever seen.

RURAL TASTE.—Addison in one of the papers of the *Spectator*, thus speaks of rural taste:—

"I regard the man who surrounds his dwelling with objects of rural taste, or even plants a shade tree by the road-side, as a public benefactor; not merely because he adds something to the general beauty of the country, and to the pleasure of those who travel through it, but, because also, he contributes something to the refinement of the gene-

ral mind;—he improves the taste specially of his own family and neighborhood. There is a power in scenes of rural beauty, to affect our social and moral feelings. A fondness of these scenes is seldom found with coarseness of sentiment and rudeness of manners. One may judge with confidence, of the taste and intelligence of a family by the external air of their dwelling. In my excursions in the country, if I pass a habitation, however spacious, standing naked to the sun, with nothing ornamental, nothing inviting, around it, I cannot help saying to myself, however abundant may be the slovenly possessions of the owner, there is no refinement in the house; there is no delicate and kindly interchange of sentiment among its inmates, and if ever they are sociable, their sociableness consists in rude and filthy loquacity. Their books are few, and those ill chosen and unread. But if I notice a dwelling, however humble, which is apparently as snug as its owner has means to make it, displaying neatness and taste in its fences, and shades and shrubbery, and flower-pots at the windows,—I feel assured that this is the abode of refinement; this is the home of quiet and rational enjoyment, of intelligent and kindly intercourse."

VISIT TO MR. STIMSON'S FARM.

Those of our readers who know the high reputation which Mr. Stimson enjoys not only as an intelligent but successful farmer, will thank us for laying before them the subjoined description by the Rev. Mr. Colman, who is also a first rate agriculturist, one who like Mr. S. combines science with practice, and can illustrate his claims to pre-eminence either with his pen or his plough.—To those who do not know Mr. Stimson, we would observe, that he is one of the best practical farmers in the state of New York; that his farm is in every sense a *pattern* for others, and is among the greatest sources of agricultural pride to the empire state.

VISIT TO MR. STIMSON'S FARM.

Extracts from the Rev. H. Colman's Agricultural Tour, as published in the New York Farmer:

From Ballston I proceeded through Milton to Galway. The country, though not hilly, was of an undulating character, and presented large swells of land; the crops of grass, oats, and wheat, every where luxuriant and abundant; Indian corn healthy in its appearance, but very backward on account of the peculiar seasons; the soil a dark loam, in which sand predominated; not very deep and rather stony. This applied particularly to Galway; and here generally the farming appeared extremely well; and what struck me as a peculiarity, as it would almost every New Englander, and be remarked as very rare, especially in Massachusetts, the farms were generally laid out in rectangular and well fenced lots, instead of the anomalous, zigzag, winding, and indescribable forms, which every where prevail with us.

A principal object of my journey soon presented itself at a distance of two miles, which was the farming establishment and residence of Earl

Stimson, Esq. whose dwelling house and numerous out buildings, placed on a commanding eminence, had more the appearance of a village than the domain of a private individual. His buildings consists of a spacious dwelling house, with extensive piazzas in front, several barns and stables, very extensive sheds, a large store, a three story building for a granary, cider house, &c.; a large slaughter house, cooper's shop, potash establishment, blacksmith's shop, and smaller dwelling houses, which, with the farm connected with them, had come into his possession and might now be said to form a part of his domicile.

The situation, being at the rectangular junction of two large roads, was favorable to the prosecution of his business as an extensive trader, and the keeper of a large hotel. The homestead includes about seven hundred acres, two hundred of which are in wood and the rest are in meadow, pasture, or under the plough. He has himself favored the public with an account of his management and cultivation, in his address to the Saratoga Agricultural Society; and an exact and detailed statement of the produce and course of crops of a certain portion of his land is given by Dr. Steele, in his survey of the agriculture of Saratoga county, in New York, *Memoirs of Board of Agriculture*, vol. II, p. 69. I shall, however, detail from recollection the account which I received from himself; and record such remarks as suggested themselves on the premises.

The soil is generally of a dark loam, resting upon sandstone and carbonate of lime. The analysis of the soil, as given by Dr. Steele, is subjoined:

Water,	9.5
Animal and vegetable matter,	12.5
Alumine,	18.5
Siliceous sand,	54.
Carbonate of lime,	3.
Soluble salts,	1.
Oxide of iron,	1.
	—
	98.5
Loss,	1.5
	—
	100.

The great roads passing through the farm, and crossing at its centre at right angles, give a straight line to all the outside fences; and the fields every where divided into rectangular lots of eight or ten acres, are enclosed by stone walls formed of small stones gathered from the land, and surmounted by posts and two rails. The cultivation exhibited an exemplary neatness, as in but a single instance did I remark any weeds or briars growing near the fences; and these had been recently mowed.

Mr. Stimson is highly systematical in his farming, and pursues a determined rotation of crops, beginning usually with wheat, then corn, barley, clover, and herdsgrass two or three years; then frequently depastures his fields for one year; after which they are again subjected to the plough, following the same rotation as before, excepting that corn is sometimes a first crop after the land is broken up; and flax sometimes takes the place of corn or barley, in the rotation.

He manures his land once only in six years, excepting the application of plaster to his corn. He allows five loads of barn yard manure, and

three of leached ashes, to an acre; and this is always spread upon the surface after ploughing for the first crop, and either harrowed or ploughed in by a very light ploughing. In ploughing he never permits the plough to go deeper than three inches; the sod is turned over flat, and then rolled, it being his great object to keep all the vegetable matter on the surface. In the ploughing for the second crop in the rotation, the sod being completely decomposed, is turned, and affords a fine soil for the ensuing crop. Though a good deal of the manure is in this way lost by evaporation, yet he considers this loss as much less than that which is occasioned by burying it under the sod. He deems leached ashes a most valuable manure, and much to be preferred to that which is unleached, which he considers as having a tendency at first to force the land, but in the end to impoverish it. Next to leached ashes, he deems lime the best manure for land. The opinions of so intelligent, experienced, and successful a farmer, are certainly entitled to the highest respect, and we shall not undertake to theorize on the subject; but the subject is still a matter for experiment, and deserves the most careful and philosophical investigation.

Wheat is generally the first crop in the rotation, in which case it is usually sowed in the autumn; and harrowed in at the rate of two bushels to the acre. His average crop is from thirty to forty bushels per acre. This year (1832) he has sixty acres in wheat. Of Indian corn his average product is about five thousand bushels. He assured me that for the last ten years it had exceeded the average rate of one hundred bushels to the acre. He plants an eight rowed kind, with a small ear, on the ground where he had wheat, in hills two feet eight inches apart each way; the places of planting being accurately marked out by a simple machine with four teeth, like a rake, and drawn by a horse, which marks the piece to be planted in one direction, and then crosses these marks at right angles. Four stalks only are left in the hill, and it is ploughed slightly, or harrowed twice. Sometimes plaster is applied to the hill, at the rate of about five pecks to the acre. He is of opinion that too much manure may be applied for any crop excepting corn. This cannot be manured too highly. Owing to the unfavorableness of the season, his corn, much of which had been planted twice, seemed quite small, and in his opinion would hardly yield him a third of a usual crop.

Potatoes are planted by him at the same distance as his corn, and on the outside of his corn fields. At the second hoeing of his potatoes, he takes pains to open the top of each hill with the foot, and to put a hoeful of dirt directly on the centre, by which means, the sun is admitted to the potatoes, which he deems likely to contribute very much to the increase of the crop. This simple operation is in accordance with Mr. T. A. Knight's lately broached views of the great importance of light and air to the productiveness of the potatoe crop; but in a partial experiment, I have not myself, perceived any sensible advantage from it. His average yield of potatoes is about five hundred bushels to an acre; and he raises yearly about two thousand bushels.

Flax is likewise a valuable crop, of which he calculates to obtain at least twenty bushels of seed,

and four hundred pounds of flax; commonly more than this. His flax fields, which he was then pulling, with a platoon of sixteen men, exhibited a most luxuriant growth. After the flax is pulled and rotted, he has it cleaned and prepared for market, for two and a half cents per lb. What he usually obtains over six cents per pound for his flax, will pay for the cleaning of it. He is of opinion that it will do to repeat flax on the same land once in six years. Barley, or rye, is another crop in his rotation, and ordinarily follows corn. Barley he considers as much the best crop, with which to lay down his land to grass.

His plan of laying down his land to grass, is to sow the grass seed at the time he sows his barley, at the rate of 3 lbs. of clover seed, and 4 qts. of Timothy or herd-grass. His crop of grass averages about two and a half tons to an acre.—He feeds many of his mowing fields until the 20th of June. His grass, as I saw it, was quite ripe, and farther advanced than we are accustomed to having it at the time of mowing; and this perhaps, accounts for his practice of cutting his grass in the morning, and housing it at night of the same day, which he informed me he frequently did. The proper time of cutting grass, with reference to their nutritive properties, is a subject which has not received all the attention which it deserves. According to chemical analysis, some grasses are much more nutritive after their seed is perfected, than when cut in the flower. It is the reverse with other grasses. In respect, for example, to timothy or herds-grass, according to Sinclair's table annexed to Davy's *Agricultural Chemistry*, it is said that "the nutritive powers of the straws simply therefore exceed those of the leaves in proportion as 28 to 8; and the grass at the time of flowering, to that at the time the seed is ripe, as 10 to 23, and the latter math to the grass of the flowering crop, as 8 to 10."

Mr. Stimson mows his grass land usually two years, and pastures it the ensuing year. This completes his rotation of six years, and he then begins the same course again. Thus:

- 1, Wheat—manured.
- 2, Corn—plastered.
- 3, Flax, Rye, or Barley.
- 4, Clover and Herds-grass.
- 5, Clover and Herds-grass.
- 6, Pasture.

His potatoes are usually planted round his corn fields, three or four rows on each side, so as to render it convenient to come out with a horse and turn the plough. He puts one large or two good size potatoes in a hill. He steeps his seed corn before planting in a mixture of 1-4 lb. of saltpetre, to 3 pints of water, and then rolls the seed in plaster.

He purchases large numbers of cattle in the fall; those which are in the condition to kill, he slaughters and packs; and it is then forwarded to the New York market, where it is repacked, inspected, and fully salted, at the expense of 75 cts. per barrel. The cattle not in condition for beef he winters, and disposes of the next spring and autumn.

He kills and packs great quantities of pork, and bacons the legs. For packing his beef he uses 4 quarts of salt with some saltpetre; and for his pork, 14 quarts of salt to each barrel, which he deems sufficient to keep it until it is repacked in

New York. He considers this a better mode of disposing of his pork and beef, than to send his cattle on the hoof, or his pork unsalted, to market.

His preparation for his hams is 4 oz. salt petre, 4 qts. of salt, 1 pint of molasses, 1 oz. of pearl ash to 100 wt. of meat. They are to be smoked 3 weeks with maple or walnut wood. Recently he slaughtered 20 hogs, whose average weight was 414 lbs. each. His hams are preserved by being sowed in paper, or in coarse bags, and white-washed, and suspended in his storehouse. He has at present 700 sheep, which he considers as a profitable stock. He has thirty cows. He has paid little or no attention to the improvement of his stock, selecting his cows from the numerous droves which he purchases for feeding or slaughter. He never puts his young cattle in the barn. He has large and commodious sheds for their protection; and he always chooses to have wooden floors in the sheds for them to lie upon. He chooses to keep his different kinds of stock separately from each other; his milch cows in one yard, his young cattle in another.

With his laborers he always makes a written agreement, stipulating to board them, but furnishing no ardent spirits; and requiring of them good manners and good temper; early rising; a readiness to assist in husking in the evening, and to do any extra job which may be customary on a farm; and an attendance upon public worship in their turn.

Such were a few hasty and cursory observations which occurred to me in a short but highly gratifying visit to this interesting and instructive establishment; and I beg leave to express my grateful sense of the kindness and hospitality which I received; and the politeness with which the information I sought was communicated to me. In extent, in productiveness, or in its admirable management, I have seen no individual establishment to be compared with it. In extent I except the magnificent farm of Mr. Wadsworth, in Genesee, which is confined to grazing, and where, a few years since, for it is some time since I had the gratification of visiting it, not a bushel of wheat was raised. As a dairy farm, likewise, that of Mr. Bussey, at Hoosic; and the grand establishment of Robert Smith, Esq., near Baltimore, where one hundred cows were soiled, are likewise before it; but I speak of it in respect to the variety of business, cultivation, and products; of the skill, system and success, displayed in its management.

Mr. Stimson has peculiar advantages in his abundant capital; in the profitable consumption of a large amount of his produce by means of his hotel, which is much frequented; in a most abundant supply of manure from his stables, slaughter house, piggery, and potash establishment; and in his facilities for procuring labor.—But I saw no part of the process of his farming which may not be copied by other farmers, on a smaller scale; and especially as he does not apply a larger amount of manure to an acre than what is applied in other cases by many farmers.

The great points of difference between his own and the management of other farmers, and almost all other farmers, deserve peculiar attention. They consist, first, in the regular arrangement of his lots, which are all laid down upon

the plan, and the management of each pursued systematically, and made matter of exact record.

Secondly, in his shallow ploughing, by which the vegetable mould is always kept in its proper place; or what he says, nature teaches is the proper place, on the surface.

Thirdly, in the incorporation of the manure with this vegetable matter, instead of burying it among the gravel or loam.

Fourthly, in his exact and systematic mode of planting; his corn being as regularly deposited as straight lines can make it.

Fifthly, in his economy of labor, his ploughing after breaking up his green sward, which is done by two horses, always being performed with one horse to a plough. He informed me that the last spring, with eight horses, he set eight ploughs in operation.

Sixthly, in his pursuing with each piece of land a regular rotation of crops. In this way the land is taxed but once in six years for the particular qualities of the soil demanded by each particular crop; and by being three years in grass and clover, a new supply of vegetable matter is left upon the surface, to be turned under for its improvement, preparatory to a second rotation.

His ploughs are an improvement upon the Scotch plough, and of very easy draught. Of other utensils, I remarked none of a peculiar construction. He has a superior cider mill, and made last year from his farm five hundred barrels of cider. He has contrived a saw to go by horse power, with which he says two men, a boy, and a horse, are able to saw thirty cords of wood per day.

His men breakfast at six o'clock; dine at 12 A. M.; and sup when work is done at night. A large party of them were at work in a field nearly a quarter of a mile from the house, pulling flax, soon after 4 o'clock in the morning. He furnishes them a luncheon of bread and butter, or bread and cheese, in the field, at 10 o'clock A. M. and 4 o'clock P. M. Their drink, consisting of cider, cider and water, molasses and water, milk and water, is carried to them in the field.—Above all, his farming, as well as all other of his operations, are under his constant and immediate supervision. To an inquiry, who was his foreman, his answer was, that he had no foreman, he was his own foreman. To every man was assigned his proper task, which he was expected to perform, so that the responsibility rested upon himself alone; and under this conviction he was more likely to be faithful. I quitted the place with a just admiration of its extraordinary management, and not without a deep surprise at the system, skill, care and success, with which such heavy and various concerns were carried on, and a press of business maintained and conducted, under which ordinary men would have overwhelmed and confounded; the cumbrous and complicated machinery making its gyrations and movements without dislocation, without friction, and without any sensible concussion or jarring of the moved or moving body.

FOREIGN ABSTRACT.

Advices from England to the 8th August have been received. The Irish Church bill has been agreed to in the House of Commons. A mob of between 20 and 30,000 persons growing out of

the dissensions of the orangemen and reformers, took place in Dublin, Ireland, on the 3d August. They were armed with bludgeons, knives, pikes stones, &c. and were ultimately put down by two companies of the 99th regiment, and the city horse and foot police, but not until several were severely wounded.

In France the late attempted assassination of the king and family, has caused a most rigid code of laws, to be submitted to the Chambers, regulating the press, the political faith of individuals, private opinion, theatrical representations, in fine a code of consummate tyranny—such a code as none but dastards would live under.

In Spain six convents were burnt, and many of the monks and friars cruelly butchered.

In Hamburg a mob attacked the Jews without provocation, and much blood was spilt and hard knocks given on both sides. A body of forty young Jews made a defence which reflects lasting credit on them.

Later still.—Paris papers to the 15th, and London to the 12th August, have been received. There appears to be little news from France except the prosecution of editors. The cholera was greatly diminished. The Americans in Paris had addressed the King congratulating him upon his escape from the attack upon his life. The reform bill it was supposed would pass in England. In Spain the horrible outrages of the mob continue; not content with their revolting butchery of the unoffending monks they are about to attack private persons and their property. In Portugal there has been a change of ministry. In Prussia there has been a dreadful riot, which was put down by the bayonet. In Russia a conspiracy against the Emperor has been discovered.

The Markets for cottons in Havre flat and a reduction of from 2 to 5 centimes. Louisianas 115, 117; 50 to 122. In Liverpool Aug. 12.—The demand was kept up as well from consumers as from speculators, at steady prices, for all qualities, equal to and above middling fair; ordinary cottons neglected; extreme quotations, 9½c. a 14c.

Our advices from the interior announce a slight improvement. As this agrees with the better aspect of things here, we have reason to believe that we have seen our lowest prices.

Ohio and Michigan.—We are rejoiced to hear from the *National Intelligencer*, that the crisis which seemed so lately to threaten actual bloodshed between the citizens of Ohio and those of Michigan, has passed off peaceably, and that all fears of collision between them may be dismissed, for the present at least, and we hope forever. Letters were received in this city yesterday, stating that the troops of Michigan, (about 2000 strong,) after remaining at Toledo, in the disputed territory, for two days, without meeting with any adverse force from Ohio, or any attempt on the part of the functionaries of that State to exercise official authority, departed on the 9th instant, on their return to Detroit; and before any fresh excitement could lead to hostilities, the new Secretary for Michigan would have arrived at Detroit, with such instructions doubtless as will prevent any further hostile movement be-

fore the dispute shall be adjusted by the authority of Congress or of the Judiciary.

DOMESTIC SUMMARY

We learn from the *Union* published at Gallatin, Tennessee, that the small pox "is raging to considerable extent in Nashville, Tennessee, and Paris, Ky." The Georgia Rail-road, leading from *Augusta* through the elevated ridge, separating the waters of the Savannah River from those of Brice Creek and the Ogechee, is progressing handsomely towards completion. Books of subscription were opened in Mobile, Alabama, to the Montgomery and Chatahoochee Rail-road on the 14th inst. The road is designed to connect the waters of the Alabama, at Montgomery with the Chatahoochee, at West Point. West Point is at the head of the falls of the Chatahoochee, thirty-five miles above Columbus. For that distance, there is a succession of swift rapids and falls, which totally close the descending navigation, while for a hundred and fifty miles above, the river presents the finest steamboat navigation, and runs through the most fertile cotton growing counties in Georgia.

The surveys made for the Chesapeake and Ohio Canal between the South Branch and Cumberland, have been referred to a committee of the Board for examination, with the expectation that some one of the routes will be adopted early in October. God-speed these good works!

LAFAYETTE COLLEGE.

EASTON, PENNSYLVANIA.

We comply with the request of copying into our Journal the subjoined advertisement of this institution, with the more pleasure, because we are amongst those who believe that colleges of education, combining manual labor with their studies, are eminently calculated to promote the interests of the community, in lessening the expense to parents, and in giving an industrious direction to the minds of youth, besides imparting a healthful tone and action to their physical system.

The College is located on the high ground north of the Bushkill creek, within the borough of Easton, Pennsylvania, in a beautiful and healthy situation; and from the high character of the President of the Board of Trustees, as well as that of the President of the College, parents and guardians have the surest guaranties, that every attention will be paid to the moral and intellectual advancement of their children and wards.

The summer term of this Institution will close on the 2d of September, and the winter term will open Thursday, the 23d of October.

Besides the advantages of the regular college classes, in reference to which we have here nothing peculiar, the students enjoy the opportunity of acquiring (in the Academical Department) a *business education* and a knowledge of the German, French and Italian Languages, without extra expense.

Additional to the instructors heretofore en-

gaged, we have the pleasure of announcing the appointment of Mr. Thomas G. Clemson, of Philadelphia, as Professor of Chemistry, Geology and Mineralogy, and that a Chemical and Philosophical apparatus is about to be procured, and will be, it is hoped, ready for service in an early part of the ensuing term. Besides the principal, we have now, a Professor of Ancient Languages, a Professor of Mathematics, a Professor of Modern Languages, a Professor of Chemistry, and a Master of the Academical Department.

It is scarcely necessary to say that for beauty and healthfulness of location this college stands without a successful rival.

Applications for admission should be made to the President of the College sometime previously to the commencement of the term: and students should be punctual in attendance at the day, for a new class in Latin, German, &c. is formed in term, and only one.

The Principal and three others of the instructors reside in the college. A lecture is delivered on the Sabbath for the benefit of the students, and according to age, they are divided into two classes for Biblical instruction, in addition to which they have access, at will, to public worship in the Lutheran, Presbyterian, German Reformed, Episcopalian or Methodist Church. Parents and guardians are requested to state in writing at which of these services their sons or wards are to attend, as also what course of studies they wish them to pursue, viz: whether a regular classical course, or only the business course, which may include German, French or Italian. Every student must furnish satisfactory evidence of good moral character, and those who are under 16 it is very desirable should not be furnished with pocket money. Students furnish their own rooms, and are charged as follows, viz: For boarding, tuition, fuel in recitation rooms, room rent, facilities of manual labor and use of library, winter term, 23 weeks, - - - - \$57 00 Summer term, 21 weeks, - - - - 53 00 For fuel in private rooms and attendance, 3 33 Washing at 30 cents per dozen, and oil, about 11 67

Entire college charges, - - - \$125 00 From which is deducted the value of labor (3 hours per day.) This of course is very various, from six to sixty per cent. The term charges payable half in advance and with those under 16 a deposit should be made with the principal to meet contingencies, the disbursement of which appears on the term bills. Such as enter before the middle of the term pay tuition for the whole; after the middle any time one half. If a student leave before the close of a term no drawback or reduction will be made, except in case of sickness, or other inevitable necessity, of which however the faculty must judge.

J. M. PORTER,

President of the Board of Trustees.

GEO. JUNKIN,

President of the College.

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—Standard weight of Potatoes and Oats—Notice of southern and western crops—Rice raised in Maryland—Method of fattening calves—Mr. Schmoldt on the culture of *rape* or *cole seed*, mangel wurzel, and the treatment of Hoven in cattle—Agricola on sheep husbandry—Col. Hillen on the destruction of garlic—Account of a new variety of wheat called "Short Wheat"—Addison on Rural taste—Visit to Mr. Stimson's farm—Foreign abstract—Ohio and Michigan—Domestic Summary—Lafayette—Prices Current, &c.—Advertisements.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,.....	bushel.	2 50	—
CATTLE, on the hoof,.....	100lbs.	5 00	6 00
CORN, yellow,.....	bushel.	85	87
White,.....	"	85	87
COTTON, Virginia,.....	pound.	18½	—
North Carolina,.....	"	—	—
Upland,.....	"	18½	20
FEATHERS,.....	pound.	37	40
FLAXSEED,.....	bushel.	1 25	1 37½
FLOUR & MEAL—Best wh. wh't fam.	barrel.	7 25	7 75
Do. do. baker's,.....	"	6 75	7 25
Do. do. Superfine,.....	"	6 12	6 37
SuperHow. st. in good de'd	"	6 25	—
" " wagon price,.....	"	—	6 00
City Mills, extra,.....	"	—	6 12
Do.	"	—	6 00
Susquehanna, firm & scarce	"	—	6 12
Rye,.....	"	4 75	5 00
Kiln-dried Meal, in hhds.	hhd.	19 00	—
do. in bbls.	bbl.	4 00	4 25
GRASS SEEDS, red Clover,.....	bushel.	5 00	5 50
Timothy (herds of the north)	"	2 75	3 25
Orchard,.....	"	2 25	3 00
Tall meadow Oat,.....	"	2 00	2 50
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.	—	15 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	8
HOGS, on the hoof,.....	100lb.	7 00	7 25
Slaughtered,.....	"	—	—
HOPS—first sort,.....	pound.	12½	—
second,.....	"	10	—
refuse,.....	"	8	—
LIME,.....	bushel.	33	35
MUSTARD SEED, Domestic,.....	"	5 00	6 00
OATS,.....	"	32	34
PEAS, red eye,.....	bushel.	—	—
Black eye,.....	"	—	1 25
Lady,.....	"	—	—
PLASTER PARIS, in the stone,.....	ton.	—	3 50
Ground,.....	barrel.	1 25	—
PALMA CHRISTA BEAN,.....	bushel.	2 00	—
RAGS,.....	pound.	3	4
RYE,.....	bushel.	70	73
Susquehanna,.....	"	none	—
TOBACCO, crop, common,.....	100 lbs	4 50	5 00
" brown and red,....	"	5 00	7 00
" fine red,.....	"	7 00	9 00
" wrappery, suitable	"	—	—
for segars,.....	"	5 00	10 00
" yellow and red,....	"	8 00	12 00
" yellow,.....	"	9 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"	4 00	—
" ground leaf,.....	"	5 00	8 00
Virginia,.....	"	5 00	10 00
Rappahannock,.....	"	—	—
Kentucky,.....	"	8 00	14 00
WHEAT, white,.....	bushel.	1 30	1 35
Red,.....	"	1 20	1 28
WHISKEY, 1st pf. in bbls.	gallon.	37	37½
" in hhds.	"	35	dull
" wagon price,.....	"	33	33½
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 50	—
To Wheeling, ..	"	1 75	—
WOOL, Prime & Saxon Fleeces, ..	pound.	62 to 75	32 to 34
Full Merino,.....	"	52	62 30 32
Three fourths Merino, ..	"	47	52 28 30
One half do.....	"	42	47 26 28
Common & one fourth Meri.	"	38	42 25 26
Pulled,.....	"	38	42 26 28

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

VIRGINIA.	
U. S. Bank,	par
Branch at Baltimore,	do
Other Branches,	do
MARYLAND.	
Banks in Baltimore,	par
Hagerstown,	do
Frederick,	do
Westminster,	do
Farmers' Bank of Mary'd, do	do
Do. payable at Easton,	do
Salisbury,	5 per ct. dis.
Cumberland,	do
Millington,	do
DISTRICT.	
Washington,	do
Georgetown,	do
Alexandria,	do
PENNSYLVANIA.	
Philadelphia,	do
Chambersburg,	do
Gettysburg,	do
Pittsburg,	do
York,	do
Other Pennsylvania Bks. 1 1/2	do
Delaware [under \$5],	3a1
Do. [over \$5],	4a1
Michigan Banks,	5a
Canadian do,	5a

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.	—	—
BACON, hams, new, Balt. cured,	pound.	11	11 1/2
Shoulders,	do	10	—
Middlings,	do	10	—
Assorted, country,	do	9	9 1/2
BUTTER, printed, in lbs. & half lbs.	do	18 1/2	25
Roll,	do	—	—
CIDER,	barrel.	—	—
CALVES, three to six weeks old,	each.	3 00	6 00
COWS, new milch,	do	17 00	30 00
Dry,	do	8 00	12 00
CORN MEAL, for family use,	100lbs.	1 94	2 00
CHOP RYE,	do	1 62 1/2	1 75
EGGS,	dozen.	—	—
FISH, Shad, No. 1, Susquehanna,	barrel.	7 75	—
No. 2,	do	6 75	—
Herrings, salted, No. 1,	do	4 25	—
Mackerel, No. 3,	do	4 50	—
Cod, salted,	cwt.	2 25	2 75
LARD,	pound.	10	10 1/2

NOTICE TO CAPITALISTS.

THE undersigned having been engaged for a number of years past in the Linnean Garden & Nurseries at this place, in a department where he has had every opportunity of becoming thoroughly acquainted with the business, wishes to form a connection with some person of capital, either as active or silent partner, for the purpose of carrying on the Nursery & Garden Seed business. To a person wishing to engage in a lucrative business, it is an opportunity rarely to be met with. Any communications addressed to the subscriber, will be treated as strictly confidential. G. R. GARRETSON.

Flushing, L. I.—Sept. 1st, 1835. sep 8

OYSTER SHELL LIME.

ORDERS for any amount of the above valuable article will be received and promptly filled if left at this office. The incalculable value of lime as a manure is so well known that it is useless to dwell upon it in this advertisement. It will be delivered at any convenient landing place on the Chesapeake bay or its tributary waters, which may not be more than 70 miles distant from Wor-ton Creek, Kent county, at 8 cents per bushel. Unburnt shells delivered at 4 1/2 cts. per bushel. se 8

50 BUSHELS OF BUCKWHEAT, suitable for seed, just received and for sale. Apply to
June 16th. SINCLAIR & MOORE.

THE SUBSCRIBER offers for sale at the Maryland Agricultural Repository, Light street, a large and general assortment of

PLOUGHS.

The Self-Sharpening Plough possesses the advantage of having a moveable steel point, from fifteen to twenty-four inches long, which can be reversed, as a bevel is formed by wearing, and advanced as it becomes shorter, so as to bring into actual wear from twelve to eighteen inches of solid wrought bar; by thus changing the point, the share continues to perform its work well until worn off nearly up to the mould board; whereas, without this moveable point, shares are generally rendered useless when only half worn.

This valuable principle may be applied to any shape of mould board.

SELF-SHARPENING.

- No. 00. The smallest size is a 7 inch seed and cultivating plough price \$5 00
- No. 0. A one-horse cultivating plough, 8 inches wide, nearly the same length as the smaller one, but has a bolder mould board, and better adapted to sandy lands. The shares and heels of these two sizes suit each other 5 25
- No. 1. A light two-horse 6 25
- " 2. A two-horse plough, 9 inches wide 7 00
- " 3. A two-horse flushing plough 8 00
- " 4. A heavy three-horse plough with sword coulter 12 00

WOOD'S PATENT.

- No. 21. A seed and cultivating plough, 8 inches wide, with cast share 5 00
- Corn. A one-horse plough, with wrought iron standard and cast share 5 50
- No. 1. A. Is a light two-horse plough, 9 inches wide 6 50
- " 1 1/2. A two-horse plough, with sword coulter and cast share, a superior flushing plough 8 00

The above ploughs of Wood's Patent are entitled to two extra shares each, at the above prices.

- SINCLAIR & MOORE'S IMPROVED.
- 6 inch. A superior seed plough, with cast shares 4 50
- 7 " A one-horse ditto ditto 5 00
- 8 inch. A light two-horse plough, with cast shares 5 50
- 9 " A two-horse ditto ditto 7 00
- 10 " A two or light three-horse plough, with sword coulter and cast share 9 50
- 10 " A three-horse plough with wrought share 10 00
- 10 " A three-horse plough with sword coulter, a superior flushing plough, made both right and left handed 11 50
- 12 " A heavy three-horse plough, with sword coulter 14 00

M'CORMICK'S PATENT.

- 7 inch. One-horse wrought shared plough 5 00
- 8 " Light two-horse ditto ditto 7 00
- 9 " Two-horse plough, with sword coulter 9 50
- 10 " Three-horse plough, with coulter 11 50
- 12 " Heavy three-horse plough, with coulter 14 00

BAR-SHARE.

- No. 1. Is a 7 inch plough, with wrought share and lock coulter 6 25
- " Is a 7 inch plough, without coulter 5 00
- " 1 1/2. A one-horse plough, with wrought share and coulter 7 00
- " 2. A light two-horse plough, with wrought share and coulter 8 00
- " 3. A two-horse plough, with wrought share and coulter 9 50
- " 3 1/2. A heavy two-horse plough, with wrought share and coulter 10 00
- " 5. A heavy three-horse flushing plough, with wrought share and coulter 13 00

HILL-SIDE.

A plough suited to two horses, with cast share, changes with ease, so as to throw the furrow to the right or left 10 00

SHOVEL-PLOUGH.

Wrought shares 4 50

CARY-PLOUGH.

- No. 1. A one-horse plough, having nearly the form of mould board as the well known Cary or Dagon plough, but has a cast iron mould board and wrought share. The mould board is bold, opens a wide furrow, does clean work, and is very

- strong and simple in its construction 5 00
- No. 2. A light two-horse plough of the same construction. 6 50

BUFFALO PLOUGH.

- No. 1. H. A one-horse plough, with cast share 5 00
- No. 1 1/2 H. A two-horse plough, with cast share 8 00
- " 2. H. Heavy two-horse ditto, 9 00

The form of the mould board of these improved ploughs, is somewhat on the principle laid down by Thomas Jefferson, but varied so as to equalize the pressure on the mould board, as observation in the practical use has directed.

DOUBLE MOULD BOARD.

Two sizes; a very useful plough for cultivating potatoes, &c. and for ploughing up potatoes at the time for gathering the crop. Price \$7 00 to 10 00

EXTRA CASTINGS FOR PLOUGHS.

Together with several new patterns, which will be sold low.

CULTIVATORS.

- Those with five wrought tines, of the most approved shape 5 25
- Five tines, of more simple form 5 00
- Cast tined - from 3 50 to 4 00
- If made to expand, 50 cents additional.

WHEAT FANS.

- Improved - \$24 00 to 25 00
- Ditto extra large 28 00
- Ditto ditto recent improvement 33 00
- Common Fans 19 00
- Box Fans, small size 15 00

STRAW CUTTERS.

- 20 inch. Cylindrical straw cutter, suited to horse or water power, capable of cutting from 75 to 100 bushels per hour 75 00
- Extra knives per set 6 00
- 14 " Box same construction, suited to manual power 45 00
- Extra knives per set 5 00
- 11 " Box 27 00
- Extra knives per set 4 00

These machines are self-feeders, the knives are of spiral form, and act on the bed steel in such a manner as to cut with great ease without a very keen edge: many thousand bushels have been cut with them without sharpening the knives.

- Common Dutch straw cutter with treadle 7 50
- Ditto without treadle 5 00

CORN SHELLERS.

Of the various kinds offered to the public, the one generally preferred is that with a vertical iron wheel with spring holders, which adapt themselves to any sized ears. There is no machine more certain to answer the intended purpose; they are very durable and easily kept in order, and will shell from 15 to 20 bushels per hour by hand, and are now sold at the reduced price of \$19 00, with a discount of five per cent. if cash be paid.

JAMES MOORE,

Sept. 1 Successor to SINCLAIR & MOORE.

DURHAM STOCK.

A gentleman about to emigrate to the South, will dispose of three superior animals of the improved Durham Short-Horn breed, the one a bull rising 4 years old, a cow between 9 and 10 years old, and her bull calf 3 months old on the 1st September, instant. The bull was raised by Dr. Pool, of New Brunswick, Maine, got by imported thorough-bred Bishop, by Wellington—out of a thorough-bred imported cow, called Maria; the cow is imported, and is a beautiful animal, having every mark and point of a thorough-bred, her colour white ground with red flecks and spots; she has given from 6 to 8 gallons of milk per day. Her calf now three months old, is also a most beautiful animal, partaking of the marks and points of his mother; he was got by the first named Bull. As the owner is anxious to sell, a bargain may be had on early application.

Letters concerning the above cattle, post paid, directed to the editor of this paper will be promptly attended to.

DEVON BULLS.

FOR SALE—Two full blood Devon Bulls. The first is a beautiful animal, 9 years old, of the purest blood and fine form, raised by one of the first breeders in the country; the other is a fine young animal, 1 year old, got by the above, out of a first rate Devon Cow. These animals will be sold on reasonable terms, their superior qualities being considered. Enquire of the Editor. sep 8 3t.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 22.

BALTIMORE, MD. SEPTEMBER 29, 1835.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, SEPT. 29, 1835.

THE CATTLE FAIR AND SALE.

The proprietors of the Farmer and Gardener having received the requisite encouragement, will hold their fair for the sale of valuable animals on those eligible lots adjoining the *Canton Race Course*, on *Saturday*, the 24th, and *Monday* the 26th October, promixo. As it is their desire it should, so they hope it will, prove a great public convenience, where gentlemen engaged in breeding may annually resort for the purchase and sale of stock of all kinds, and where the agricultural interest will find their enterprise rewarded by generous remunerating prices for the respective animals they may raise for sale, and where suitable crosses may be obtained.

All gentlemen having stock to send to their Fair, will forward their *several pedigrees, forthwith*.

Particulars hereafter.

SILK MANUAL.

The proprietors of the *Farmer and Gardener*, Baltimore, have in the press, and will speedily publish, a *complete Manual of the Mulberry and Silk Culture*, compiled from the best and most authentic sources. As the object is the promotion of a great public interest, the cost will be moderate.

The twenty-fifth anniversary of the Berkshire Agricultural Society's Cattle Show and Fair, will be held at Pittsfield, Massachusetts, on the 7th and 8th days of October ensuing.

A GOOD CHANCE FOR BREEDERS.

The editor of the *Farmer and Gardener*, Baltimore, has at *private sale*, the following highly valuable animals:

1. *Two Bulls*, one 4 years old, the other 3 or 4

months old, and a cow between 9 and 10 years old; the cow is a deep milker, giving from 6 to 8 gallons of milk per day. These cattle are all of the *improved Durham Short-horn breed*. To southern gentlemen, this would be a desirable lot, as they have been already *acclimated* in the lower part of Virginia, and are only sold in consequence of the owner intending to go to Alabama this fall. Early application should be made.

2. *Two beautiful Devon Bulls*, pure of blood, and elegant of form, the one 9 years old, the other 1 year old.

3. A full bred improved Durham Short-horn bull, a most splendid and superior animal, 1 year old; a seven-eighths blood, same age—2 cows 4 years old, $\frac{3}{4}$ blood, in calf by a full-bred bull.

4. A first rate *Devon* cow, supposed in calf to a *Devon* bull. A *Devon* bull 15 months old, out of a pure blooded *Devon* cow, and got by Patterson's celebrated *Devon* bull *Bolivar*.

5. Besides the above, he has a lot of from 12 to 16 beautiful young *Devons*, of *both sexes*, chiefly from rising one year and upwards to three years old.

All of which animals can be recommended, and will be sold at fair prices. Applications, to be made to the editor of the *Farmer and Gardener*, Baltimore.

BLOODED CATTLE.

The full blooded improved Durham Short-horn Cattle, offered for sale by Mr. *William J. Thomson*, near Fredericktown, Maryland, are of the purest blood in the country, as will be seen by their respective pedigrees contained in the advertisement, and we beg leave to call the attention of gentlemen to them, as being worthy of their notice.

DREADFUL MORTALITY AMONG HORSES.

The *Village Herald*, printed at *Princess-Anne*, of the 22d inst., says that between *sixty* and *seventy* horses have recently died, in Somerset county, Md., of what is called the *blind staggers*, and invites communications of remedies for this fatal malady.

The disease is one which requires the most prompt and vigorous treatment—*bleeding, purging* and *clustering* freely, should be resorted to—the animals should be made to undergo gentle

exercise, and be subjected to friction with a hard brush or rough cloth. And first of all, every horse in the infected district should be taken from the pastures, and placed in the stables; for the cause of the disease is either referrible to something the horses find in or on the grass they eat, or in the atmosphere. If atmospheric, chloride of lime solutions, sprinkled over the stables will be necessary, or some other equally salutary fumigation should be used. Say, equal portions of common table salt, manganese and vitriolic acid. If the latter be used, the horses must not be put in the stables or sheds for some considerable time after it has ceased to emit its gas.

Prudence would seem to dictate that every horse within the limits of the disease, should be made to undergo medical treatment, whether sick or well; for although there may be no outward indications of disease, the poison may be making its insidious ravages within, and therefore it will be safest to anticipate its external manifestations.

We were presented on Tuesday last, by Richard B. Spalding, Esq., of Green-wood, with 4 stalks of grass, viz:

1. A stalk of Gama Grass, 6 feet 8 inches in height. It was cut to the ground on the 1st July, and no extraordinary pains of cultivation has since been given to it.

2. A stalk of Orchard grass 4 feet 10 inches high. This grass had been cut to the ground on the 9th of June.

3. A stalk of Timothy 4 feet, 3 inches, second growth.

4. A stalk of Orchard grass cut 20th Sept., 2 feet 10 inches long. It is from the spontaneous growth of seed deposited by the removal of the hay, the earth having been trodden till 20th June, by horses and carts.

We have preserved these stalks, and particularly invite such agricultural gentlemen as may not have seen the *Gama grass*, to call and see this stalk. It is the grass discovered some few years back in Missouri by Dr. *Hardeman*, and subsequently rendered familiar to most reading agriculturists by the enlightened labors of Dr. *Magoffin*, of Alabama, *William B. Meares*, Esq., of North Carolina, and other distinguished gentlemen in the South. It bears cutting every month from May to November, both inclusive, and yields, as per statements, from thirty to sixty tons, and upwards, of good hay to the acre.

A VISIT TO BROOKLAND WOOD.

We spent a few hours on Thursday the 10th instant, at *Brookland Wood*, the farm of Mr. *Richard Caton*, situated about 9 miles from our city, on the Falls Turnpike road. This fine estate consists of between 2,100 and 2,200 acres of the very best land, most of it limestone. This mineral is situated so near the surface as to offer no impediment, whatever, to quarrying it, but on the contrary, seeming, by its surface-presence, to invite its dislodgement and conversion to the purposes of building and manuring.

The proprietor of this princely estate, is passionately devoted to the business of agriculture, and combines a knowledge of its theory and practice in a pre-eminent degree. Profoundly versed in all the most approved principles of science, applicable to the pursuits of husbandry, he appropriates a portion of his means and time in the furthering such of its branches, as are novel and promise to confer benefit upon the community. At the present time, he is engaged in the culture of three articles, with a view of introducing them to the favorable notice of the agriculturists of this part of the country, in order that they may add them to their respective systems of husbandry. The articles to which we allude are, *Gama Grass*, *Palma Christi*, and *Sun Flower*.

OF THE GAMA GRASS.

The patch of *Gama Grass* is about one-sixth of an acre in extent, and is the produce of between thirty and forty roots, which were subdivided and transplanted last spring. These he had carefully preserved, without cutting, for seed, with a view of extending its cultivation upon a large scale, the ensuing year. Unfortunately, however, for the entire realization of his wishes, a day or two prior to our visit, his cattle, by one of those accidents which will occur in despite of the most active vigilance, had got in and demolished the greater portion of his seed stalks, and we do not wonder at it, for it is one of the most tempting grasses we have ever seen. He had, however, previously saved a considerable quantity of the seed, from which, together with the roots, which will bear the most liberal sub-division, he will be enabled to plant out three or four acres next spring. We were not aware until we went to *Brookland Wood*, that any gentleman, in our neighborhood, had growing any thing like the quantity which we there saw, and our surprise was the more agreeable on that account. For ourself, we have never doubted for an instant the vast superiority of this grass over all others, because there has been a concurrence of opinion among all those who have written upon it, from

North Carolina to the Mississippi. But if we had doubted, all our scepticism would have been removed, on viewing Mr. *Caton's* patch. Those stalks which were remaining untouched, were from six to seven feet high, studded on two sides from the earth to the top, with long blades of the most rich and luxuriant fodder. When we speak of the stalks of this grass being six and seven feet high, we do not desire to be understood as wishing to convey the idea of its being coarse; for according to our notion of coarseness, it is any thing else; and it should be recollected, that it was the growth of the whole season, whereas it will bear cutting for hay every 30 days, and for soiling every 15 or 20 days. If cut monthly and cured for hay as directed by our correspondent, "*Agricola*," we feel assured not only that it would yield as much as its warmest advocate has ever claimed for it; but that it will make a most delicate, luscious, nutritious, and acceptable food for stock of all kinds.

It has been said that the "*trouble*" of setting it, is so great as to deter farmers and planters from venturing upon its culture. For ourself we hold it that no business man ought to acknowledge any such word in his vocabulary, and least of all, an agriculturist. But if it must be recognized as legitimate, it should be relatively considered, and if relation be had to its *endurance* and yield, even a *dillitanti* farmer would acknowledge that the *trouble* was the mere coinage of a feminine brain. From $1\frac{1}{2}$ to 3 tons per acre, scarcely ever exceeding two, is about the average production of most other grasses, under good management, in the most favorable seasons. Clover must be sown every second year, as also many other of the grasses; timothy every seven years. At each of these alternations of culture, the expense of ploughing, seed, and sowing, have to be incurred. The *Gama Grass*, when once set, lasts for seventy years, and if cut once a month from the 1st of May till the 1st of November, both months included, "*Agricola*" says it will yield 300,000 pounds of green grass. In the curing, by his mode, the loss in drying was as 14 to 6; at which rate the aggregate amount would yield in dried hay $64\frac{1}{4}$ tons to the acre. This result seems startling, and it really is so; but from what we have seen of the grass, and from the concurrent opinion of "*Agricola*" and others, we concede to it our most implicit belief. The aggregate assumed by this writer, is one at which he had a right to arrive. He weighed the product of several of the plants or bunches, and they were 5, 15, 16, and 17 lbs. each, in all 53 lbs. or an average of $13\frac{1}{4}$ lbs. at each cutting, 7 in number. This

would carry us into the consideration of nearly two millions of pounds of the green grass, instead of the three hundred thousand, as assumed by *Agricola*; and, indeed, this latter aggregate is nearly fifty per cent. less than the reduced average weight of the plant, 8 lbs., which for safety sake, he also assumed. If we calculate the saving of labor, which a grass that lasts 70 years will effect, admitting that it should only yield 30 tons of hay to the acre, we must at once reject the plea of "*trouble*" as wholly untenable. And then the difficulty of propagating it, is more imaginary than otherwise: the seed soaked in a solution of hot water and soot 48 hours, we have had come up in 15 days, and as to the transplanting, an industrious hand ought to go over half an acre a day with ease, and surely no farmer or planter would deny so much homage to so good a plant as the *Gama*.

OF THE PALMA CHRISTI.

Of this beautiful plant, Mr. *Caton* had about an acre and a half growing, as an experiment to test its productiveness, with the ultimate view, if justified by the result, of entering largely into its culture. As most of our readers are aware, it is the vegetable from which the Castor oil of the shops is made, and those whose memories can carry them back twenty years, will recollect the rancid and disagreeable article which used to be vended at that period under that name—no more to be compared to the beautiful bland cold pressed oil of the present day, than Hercules is to Hecuba.—This little patch though planted too close, looked well, and we doubt not will make a generous return.

OF THE SUN FLOWER.

There was about the same quantity of land in this culture, adjoining the *Palma Christi*, and like it too, intended as an experiment, with ulterior views of magnitude. From the sun-flower seed a most delicious table or salad oil is made, which is pronounced by the best judges to be superior in flavor, and in the properties of keeping, to the very best olive-oil—and it is said also to be better suited to the uses of painters, than the linseed oil, possessing the quality of drying in a much greater degree than it.

Both these latter plants being growing on a corner of the Meadow situated on the road in our approach to *Brookland Wood*, delighted our sight by their beauty and luxuriance, long before we reached the premises. The flower of the latter with its large yellow bloom, nodding its head to the breeze, following the sun in its course and wooing him as it were to a lascivious embrace, contrasted with the deep purple tintured green.

of the *Palma Christi*, presented to our view a most interesting spectacle, indeed.

We hope the intelligent proprietor of Brookland Wood, will favor us with a particular account of these experiments, confident that they will be properly appreciated by our agricultural readers.

TURNIPS.

Beyond those two last patches there were several acres—we should judge eight or ten—in white turnips, planted in drills about 27 inches apart, and the plant 8 or 9 inches asunder.

Immediately adjoining these, there were between 6 and 7 acres in RUTA BAGA, also planted in drills of the same width apart. After the usual preparation for the turnip crop, the ground was laid off in drills of the dimensions above named, the seed sown, covered over, and rolled, and after the plants came up, at the proper time, they were thinned out, and worked as necessity indicated. We have not seen any crops of the kind during the present season, which bid fairer to prove prolific.

His *Ruta Baga*, we learn, on inquiry of Mr. Caton, is preserved in the ground, through the winter, by simply turning a furrow up to the roots in the beginning of December.

Of the 2,100 or 2,200 acres of which this fine estate consists, there are about 570 acres in regular tillage, divided as follows, about 300 in Meadow, and 270 in grain, roots and other vegetable cultivation. Besides these, there are about 50 acres, in what he terms "paddock pastures," and 35 acres of grass land attached to his *park*, proper, where his *Devon* and other bulls nine or ten in number are kept.

OF THE MEADOWS.

Of the fine meadows of Mr. Caton, almost every one has heard within a hundred miles of them. Situated in a limestone valley, comprised of a rich clayey loam, they must necessarily be productive. Mr. Caton informed us that they had averaged about two tons of timothy to the acre: but when we cast our eyes around and saw three lime kilns adjoining them, with that peerless mineral peeping from beneath the surface in every direction—when we saw his fine arrangements for irrigating every field, we confess we were not satisfied with that result. "Near two tons to the acre" is far beneath our estimate of their powers of production; we believe every acre of those delightful meadows capable of yielding 4 tons to the acre. We are aware that two tons are considered a very fair product in this country, and probably as much as any country, on an average, produces; but individual cases have often occurred where three and four tons have been cut. The

table attached to *Sir Humphrey Davy's* Elements of Agricultural Chemistry, containing the results of the Experiments of Mr. *George Sinclair*, the scientific Gardener to the *Duke of Bedford*, shows, that a given quantity of land yielded at the rate of 17,334 pounds of *timothy* hay per acre, being upwards of 8½ tons. Taking then, as our average, less than one half that amount, we think we make but a reasonable demand upon the productive powers of the Brookland Wood meadows, when we say they should bring an average of four tons to the acre.

HOMESTEAD, FARM HOUSES, BARN, STABLES, &c.

The buildings on this fine estate are such as might be expected from its extent and capacity. There is the splendid mansion situated in the distance from the Manager's House, with its appendant *Chapel*, consecrated to the service of the most High. Around the Manager's House are quarters for the hands, barns, stables, blacksmith shop, wheelwright shop, shoe-makers' shop, piggeries, hog pens, calf pens, bakery, slaughter house, ashery, steaming apparatus for cooking the food for both cattle and hogs, calving house for the cows, yeanning cellar for the ewes, tool house, and indeed every other convenience which the ingenuity of man could devise for the comfort of the slaves, and other workmen, or that of the stock. We have not space to enter minutely into descriptions of these several buildings, and but for the desire we feel of doing justice to some, we should pass them all over with the single remark, that they are each peculiarly fitted for their respective purposes.

The quarters of the slaves are so arranged that each contains but two beds, so as to prevent the ill consequences attendant upon the huddling of many persons together in confined apartments.—And in order to guard against the bad effects of the accumulation of filth, strict attention is paid to the regular cleansing of them, nor is less care given to diet and clothing; so that every thing which humanity or health could demand, is accorded as the free-will-offering of kind feelings and enlightened philanthropy.

The *Barn* is an ample building. In it there are machinery, which, with four mule power, propel a thrashing machine, a corn sheller, a fan and a cutting box. All the grain is taken from the field and stored in its capacious apartments, where it undergoes the processes of thrashing and fanning, and where also, the straw, corn stalks, and hay, are cut. In its lower story, the cow stables are so arranged that neither dung nor urine are lost; there also, are apartments where the lovely *Devons*, in comfort and quietness, bring forth their

fawn-like progeny, undisturbed by the vulgar gaze, or the rude obtrusion of the unthinking, either of the quadruped or biped race. And the Ewes too, of the *Bakewell*, the *Southdown*, and the *Barbara* breeds, have their place of accouchment there, where, in peace, they feel a mother's pains and realize the exquisite joy of first witnessing the object of all their solicitude.

The steaming house combines every convenience for cooking the food of the cattle and hogs, the machinery being so arranged as to consult all possible economy in the consumption of fuel and distribution of labor.

The *pig-pens* are so situated, in the vicinity of the *Dairy*, that the offal milk is conveyed to them through conduits without labor.

THE CATTLE.

The Calves when taken from their mothers are placed in a separate lot from the other cattle, where they have sheds to shelter them, and appropriate apartments to receive their food. In this lot, we saw the most interesting sight in the animal kind we ever beheld. It was 14 beautiful *Devon* Calves, with their deer-like necks and heads, and silky hides.

In another lot, there were 8 two year old heifers of the same breed, with their barrel-like bodies and glossy coats.

In a third lot, there were 21 milch cows, also of the pure *Devon* blood; all fat enough for the butcher.

In a fourth lot, there were 3 cows and a bull, of the *Devon* and Improved *Durham* short-horn cross. The lot in which these were depasturing was natural grass, and though not what might be termed a good pasture, these fine animals were in a condition, if they had been then killed, to entitle them to be called what is termed—*Show-beef*. The bull was a particularly fine 3 year old, and partook of the desirable qualities of both parents.

The *Devon* and *Durham* bulls we did not see, they being grazing in the park some distance from the other cattle.

THE SHEEP.

The flock of sheep, though not large, is comprised of fine animals—the *Bakewells*, the *Southdowns*, pure, and of grades, and a cross between the *Bakewell* and a *Barbara* ram, imported by Com. Rogers, from which Mr. Caton bred; the old ram is dead, but his brown-legged and brown-faced sons and daughters remain, to testify to his having "done the state some service." The fame of the *Bakewells* and the *Southdowns*, have been already told by other and abler pens than ours; but we must express the gratification we felt at viewing their fine forms. The *Barbara* cross, Mr. Caton thinks a happy improvement, as they make

a most hardy and thrifty animal, bear a fruitful fleece, and yield for the shambles, a carcass at once sweet, juicy, and savory.

THE HOGS.

Among them there were several breeds—the Barnitz—pure, and crosses between the Bedford, the Cobbett and the Chinese. We were much pleased with a broad-strong-backed young boar, a cross between the Bedford and the latter. It is, perhaps, invidious to single him out from among his peers; for we probably liked him best because of his jolly jowls and alderman port.

We were shewn by Mr. Caton an excellent *Drilling Machine*, presented to him while in England, by Mr. Coke, the great commoner,—a gentleman distinguished alike for his enlightened agricultural labors, and untiring exertions in behalf of liberal principles—in a word, a gentleman, whose whole life has been spent in efforts to do good. Our attention was also called to a new plough which had been constructed under the instructions of Mr. Caton; it has a chain, which, fastening to the link behind the coulter, stretches up the clevis, and thus produces an equilibrium which affords relief both to the ploughman and the animals propelling the plough. While inquiring as to the effect of this chain, we were assured by Mr. Bevan, the intelligent Manager of Mr. Caton, that they had had a new plough some time before, which their most experienced ploughman could not work with, owing to its *tilting* forward; that, by the application of the chain, it had been cured of its “*trick*,” and was now among the best on the farm. The improvement is *simple*, as all efficient agents in mechanics are, and produces, by as *simple* a process, an equalization of weight highly conducive to the proper and exact turning up of the furrow, and the ease of the ploughman and the beasts of burden.

All the hay, straw and fodder, as well as the corn stalks used on the farm, are steamed, as also the roots and grain, which are fed to the cattle and hogs; by this means, at least one-third in quantity is saved, the stock are kept in better plight, and, economy, in a most essential part of a farmer's expenses, is consulted. By this steaming process, Mr. Caton, is enabled not only to keep his milch cows full up to the pail, through the winter, but when they are turned out upon his luxuriant pastures in the spring, they are fit for beef. With respect to the corn stalks, we have one word to say. The stalks, with the fodder, tops and corn on them, are cut off close to the ground, the last of September, and put in stacks to harden the corn. By this means, the saccharine matter diffused through them is retained, by which they are much more nutritious, and

form a most excellent food for the cattle, who eat them with the utmost avidity, the operation of steaming, having the effect to restore in a great measure that sugary taste, so acceptable to the palate in their green state.

Mr. Caton shewed us 37 bushels of orchard grass seed which he had got off of $3\frac{3}{4}$ acres of land. The grass when the seed was ripe had been cut with a scythe and cradle, taken to the barn on cloths laid in the bottom of the wagon, passed through the thrashing machine, and thoroughly winnowed, and we must say, it was among the cleanest seed of that grass we have ever seen.

In conclusion, we would observe, that Mr. Caton has expended large sums of money in importing fine animals from Europe, and has now as choice a stock of Devons as are to be found in this country or Europe; for his public spirit in doing which, he is entitled to the thanks of every agriculturist in America.

We did not see his entire stock, and only speak of such as we saw and examined; and as we understand it is his wish to dispose of a part of them, his stock having got too large, we will say, that gentlemen who wish to possess themselves of pure Devons—those producers of rich yielders of Butter—sprightly fast walking oxen—cannot do better than to select from his excellent herd. We shall be happy to fulfil the commission of any gentleman at a distance who may depute us to make a selection.

For the “Farmer and Gardener.”

No I.

Mr. Roberts—The very excellent communications lately given to the public, through your valuable periodical, on the important subject of GRASSES, necessarily leads us to the consideration of other subjects of much importance to the agricultural community.

I am, and I believe sir, that there is now, hardly an intelligent cultivator of the earth, but who is satisfied of the paramount importance of a judicious “rotation of crops;” and indeed, that it is absolutely necessary,—manure, or no manure,—to a successful cultivation of soil.

With the reading and practical cultivators, this must be one of the points, I think, fairly and fully settled; and notwithstanding ignorance should continue in a thousand cases around us, to go on playing the goth in agriculture—the destroyer of one of heaven's best worldly gifts to us, yet it is certainly one of those truths, that ought now to be any thing short of perfect ignorance, a self-evident one.

With those, who will not avail themselves of the incalculable advantages to be derived from reading your periodical, and others of a similar character, I cannot conceive what is settled in cultivation of the earth; and indeed, I view it as one of the great causes, that so many of them are so unsettled in other respects, and after a few years of systematic destruction of land,—for it is

generally their only system,—they are found floating to the west or south west—some few along with birds of a similar description to the north, and like other “birds of passage,” lighting occasionally—rising, and passing on in search of soil, on which they think they can play the goth and vandal of agriculture with impunity. But sir, with those who avail themselves of the advice of one of the wisest of men, and with all their “getting,” “try to get understanding,” I view the absolute necessity of a judicious “rotation of crops,” as a settled axiom with science of agriculture. It appears to me, sir, that really enough has been given to the country of the sound theory, and equally solid experience of our successful agriculturists to settle another axiom in agricultural pursuit, viz: that a judicious system of accumulating and applying MANURE, is the great key to all highly successful cultivation of the soil. Was the country in possession of no more than the theory and practice, with its result of two such enlightened men as JUDGE BUEL and EARL STIMSON, it ought to be sufficient.

Notwithstanding the unwearied exertions that have been made by patriotic citizens of your country, to enlighten our farmers to their own pecuniary, and indeed, moral benefit, it is to be feared that there are thousands who have not any knowledge of the real benefits to be derived from the fertilizing system of cultivating the earth. Many who are but vaguely informed, and many who from not availing themselves of the excellent communications made to the country, see things “darkly as through a glass,” and have no real confidence in it. This, sir, is the result of theoretical, as well as practical ignorance, and most assuredly at this day it is “sinning against light and knowledge.”

If there is any confidence to be put in the public gazettes of our country, it is certain that provisions all over the United States, are by an advance in price, remunerating the producer better for the labor bestowed in their production, and that the rearing and fattening of meats are not behind any other article; and from the same sources of information, it is evident that the profits on judiciously managed stocks of animals for provisions of all kinds, are about upon a par with other farming profits—basing the cultivation on correct data, and doing what we ought in all such calculations, “taking every thing into view.”

In every “rotation” system, that appears founded on the theory of fertilizing cultivation of lands, which I have seen, that rotation embraces crops peculiarly calculated to produce food for the subsistence of different provision stock; consequently well fitted to aid in a manuring system; and if the last is entitled to the great importance claimed for it by its advocates amongst the most judicious and successful of our agriculturists; then it is equally judicious for every farmer to raise or fatten for market, in some shape or other, every hoof that he can well support or well fatten. I can hear of no part of the United States but good fat beef, mutton, veal, or pork, lamb or kid, commands a good fat price, and a ready market—nor is there any market in which fluctuations are less to be feared, than that which depends for its regulation on the human stomach and jaws—fancy,

fashion or folly, as in many other cases change the form of manufacture, but the raw material, as regards demand, restore a most solid foundation. In this section of the Union, it is absolutely certain,—as the weekly price current will show for years,—that the same amount of capital vested, and the business pursued with the enlightened economy and energy, of some other sections of our country, in a provision crop, would equal that of our highly fortunate staple in the best of times, through many parts of our state, while it would be a much less laborious pursuit.

If the foregoing positions are what I intended them to be, essentially correct, then it becomes an inquiry of primary importance to every planter, how a stock of animals can be managed, so as to obtain from it the greatest amount of pecuniary advantage.

Here the necessity of settling the importance, or real advantages of "SOILING," claims an early investigation, as from that mode of supporting animals, the farmer will forever receive in the greatest degree, one of the greatest advantages to be derived from the possession of his stock of animals, viz: the certain key to all agricultural pursuit—MANURE.

COMMON SENSE.

Alabama, Aug 12th, 1835.

[For the Farmer and Gardener.]

Mr. Editor—Your paper of June the 9th has an article on the "SWEET POTATO," from the "Ohio Farmer"—A remark in that article, and the circumstance that I have not ever seen a mode of cultivation of that singularly valuable root, given to the community, that has become in this section of country, now common, has induced me to believe that it is confined to this section of country; and as it is equally productive, more certain, in the production of the crop, and requires much less labor, I have thought that it might meet the wishes of some of your readers to learn it—For myself, I cannot ever think of giving this crop a separate piece of ground, or separate cultivation—it enters into my system of "mixt cropping," as an auxiliary to a corn crop, and while I retain my present views of a judicious agricultural pursuit, I can put it in no other place. The same labor that makes my corn must make my potatoes. But for those that still retain the old idea of a "potato patch"—break up the ground early, turning it over—cross plough, about a week before planting, and harrow. Lay off the ground at three feet each way. In the centre of the square, place three cuttings—or if later three slips. This is done readily with the aid of a small hoe. As soon as grass appears to commence growing, run a furrow with a scooter or bull tongues, close to the young growth, and draw a little dirt to them with the hoe, leaving them clean, like young corn, paying no attention yet to the baulks or middles. As soon as grass is again discovered to rise, run the same plough twice, near the plants, finishing off with the hoe, and still drawing dirt to the plants all round, and which now begins to assume the appearance of a hill. As soon as the grass begins again to call for attention, the vines will have shewn themselves beginning to run, plough now, the whole in-

tervals between the small hills already made, and finish off by drawing up all the intervals, regularly round the small hills, which will now become sufficiently large, and the whole ground will now assume the appearance of hills, standing regular and clean. If any of the young vines should have run considerably, as will be the case, double them across the hill, and cover them with earth, from the sides—they will throw out roots. After the vines have nearly covered the ground, the crop may be increased by an additional working, drawing up the vines across the hills, and working up dirt on them, from the alleys. The "rationale" of this plan, is thus: When in the "old way" you make a set of hills early in the spring, they sometimes get dry, in consequence of an unexpected drought, and never get fully moistened during the season—and the crop is short. This is no uncommon occurrence. By the new mode you are never compelled to work the ground, until just after a rain, you can draw up the ground as moist as you see proper—and your hills can never become dry. In the old mode, part, and no inconsiderable part of the labor, is scraping down the hills, and then drawing the same dirt back again. By the mode proposed, this labor is entirely dispensed with. By the last mode, the hills are kept cleaner, and the ground looser and which in this plan is highly important. I consider this mode, for the reason stated, much superior to hills or ridges in the old way—and I know equally productive, and more certain. We prefer, in preserving over the winter, the plan of putting in hills, on dry ground, putting around the heaps, dry pine bark, no straw, nor any other thing next to them, putting the dirt over the bark, and digging a drain, around the heap, to keep it dry—covering with a good shed of boards. Putting pine, or other straw next the potato, it absorbs the redundant moisture of the potatoes, and the damp of the earth around it, and commences a fermentation and a rotting process. The volume of air which is among the roots, must become combined with the putrescent gas, and consequently, a leaving of fermentation, and putrefaction. This plant is certainly the rival of its relative, the Irish potato, as it is erroneously called, and to the South, notwithstanding it is called the birth place of the last, much more valuable.—Many of our planters have them in a high state of preservation, until the 15th June, and some until the arrival of the new crop. The species, or variety, called the YAM, when properly prepared, about that time approaches bread, as nearly as any vegetable I know of, and is truly an agreeable preparation. A pudding is also then made of it, in which dried pears take the place of the plum, and which is a preparation that Count Rumford himself, would have hailed as happy. I have for many years admired it for its simplicity in preparation—wholesomeness, and as a certain matron would say, its "toothsome" qualities—to which may be fairly added, singularly nutritive. It is one of the comforts the poor man may have, and the rich can have it no better.

AGRICOLA

A PEEP INTO THE PATENT OFFICE.

The August number of the Journal of the Franklin Institute is before us, and we glean from

it the following descriptions of instruments, connected with agricultural pursuits, for which patents have been recently granted:

SPIRAL SPRING CHURN.—Lewis Hinkson, Hallowell, Maine, has obtained a patent for a Spiral Spring Churn, which is represented as a very simple contrivance, consisting merely in a plan for working the common dasher churn by means of the foot. The churn is to stand between two uprights, having a cross bar at top; the dasher rod is to be attached to a sliding frame, working between these uprights, like a saw frame; a rod descends from this frame, having a projecting piece on its lower end, upon which to place the foot to bring the dasher down, and upon removing the foot, two spiral springs, fixed to the frame, raise the dasher. The claim is to the application of the spiral springs, and the peculiar form and construction of the machinery for moving the dasher, as applied to this purpose.

Cotton Gin.—William S. Coaley, Norwich, Connecticut, has obtained a patent for an improvement in the Cotton Gin, which consists in forming the ribs, or grating, between which the saws work in the common saw gin, of cast iron, and case hardening them; in all other respects the gins are to be constructed as heretofore. The advantages stated to result from this improvement, are, increased durability and firmness; ease and simplicity of construction; perfect uniformity of shape, and a considerable diminution in their cost.

A machinery for Hulling Clover Seed.—Stacy West, of Harford county, Md., has obtained a patent for a machine for the above purpose. It is thus described:

Two cylinders are to be made of wood, say thirty inches long, and seven inches in diameter, and the surface of these are to be made rough by a covering of punched sheet iron, or otherwise; they are then to be placed in a trough, in which they are to stand parallel to, and nearly in contact with, each other, but inclined at an angle of about ten degrees with the horizon. Each of them has under it a semi-cylindrical concave, with its surface roughened in like manner. By means of a cog-wheel on the gudgeons of each cylinder, they are geared together, so that, when the necessary power is applied they will revolve towards each other. A cover fits on to the trough, and has a hopper at its upper end, to receive the seed to be hulled. Provision is made for adjusting the boxes in which the gudgeons revolve, so as to regulate the position of the cylinders.

[From Ruffin's Essay on Calcareous Manures.]

OBSERVATIONS ON MARL AND LIME.

The theory of the constitution of fertile and barren soils, has now been regularly discussed: it remains to show its practical application, in the use of calcareous earth as a manure. If the opinions which have been maintained are unsound, the attempt to reduce them to practice will surely expose their futility; and if they pass through that trial, agreeing with, and confirmed by facts, their truth and value must stand unquestioned. The belief in the most important of these opinions,

(the incapacity of poor soils for improvement, and its cause;) directed the commencement of my use of calcareous manures; and the manner of my practice has also been directed entirely by the views which have been exhibited. Yet in every respect the results of practice have sustained the theory of the action of calcareous manures, unless there be found an exception in the damage which has been caused by applying too heavy dressings to weak lands.

My use of calcareous earth as manure, has been almost entirely confined to that form of it which is so abundant in the neighborhood of our tide-waters—the beds of *fossil shells*, together with the earth with which they are found mixed. The shells are in various states—in some beds generally whole, and in others, reduced nearly to a coarse powder. The earth which fills their vacancies, and serves to make the whole a compact mass, in most cases is principally silicious sand, and contains no putrescent or valuable matter, other than the calcareous. The same effects might be expected from calcareous earth in any other form, whether chalk, limestone gravel, wood-ashes or lime—though the two last have other qualities besides the calcareous. During the short time that lime can remain *quick* or *caustic*, after being applied as manure, it exerts, (as before stated,) a solvent power, sometimes beneficial, and at others hurtful, which has no connexion with its subsequent and permanent action as calcareous earth.

These natural deposits of fossil shells are commonly, but very improperly, called *marl*. This misapplied term is particularly objectionable, because it induces erroneous views of this manure. Other earthly manures have long been used in England, under the name of *marl*, and numerous publications have described their general effects, and recommended their use. When the same name is given here to a different manure, many persons will consider both operations as similar, and perhaps may refer to English authorities for the purpose of testing the truth of my opinions, and the results of my practice. But no two operations called by the same name can well differ more. The process which it is my object to recommend, is simply the *application of calcareous earth in any form whatever, to soils wanting that ingredient*, and generally quite destitute of it; and the propriety of the application depends entirely on our knowing that the manure contains calcareous earth, and what proportion, and that the soil contains none. In England, the most scientific agriculturists term *marl* correctly to be a *calcareous clay*, of peculiar texture; but most authors as well as mere cultivators, have used it for any smooth soapy clay, which may, or may not have contained, so far as they knew, any proportion of calcareous matter. Indeed, in most cases, they seem unconscious of the presence, as well as of the importance of that ingredient, by not alluding to it when attempting most carefully to point out the characters by which *marl* may be known. Still less do they inquire into the deficiency of calcareous earth, in soils proposed to be *marled*—but apply any earths which either science or ignorance may have called *marl*, to any soils within a convenient distance—and rely upon the subsequent effects to direct whether the operation shall be continued or abandoned. Au-

thors of the highest character, (as Sinclair and Young, for example,) when telling of the practical use, and valuable effects of *marl*, omit giving the strength of the manure, and generally even its nature—and in no instance have I found the ingredients of the soil stated, so that the reader might learn what kind of operation really was described, or be enabled to form a judgment of its propriety. From all this, it follows that though what is called *marling*, in England, may sometimes (though very rarely, as I infer,) be the same chemical operation on the soil that I am recommending, yet it may also be, either applying clay to sand, or clay to chalk, or true *marl* to either of those soils—and the reader will generally be left to guess in every separate case, which of all these operations is meant by the term *marling*. For these reasons, the practical knowledge to be gathered from all this mass of written instruction on *marling*, will be far less abundant, than the inevitable errors and mistakes. The recommendations of *marl* by English authors, induced me very early to look to what was here called by the same name, as a means for improvement: but their descriptions of the manure convinced me that our *marl* was nothing like theirs, and thus actually deterred me from using it, until other views instructed me that its value did not depend on its having “a soapy feel,” or on any mixture of clay whatever.

Nevertheless, much valuable information may be obtained from these same works, on calcareous manure, or on *marl*, (in the sense it is used among us)—but under a different head, viz. *lime*. This manure is generally treated of with as little clearness or correctness, as is done with *marl*: but the reader at least cannot be mistaken in this, that the ultimate effect of every application of lime, must be to make the soil more calcareous; and to that cause solely are to be imputed all the long continued consequences, and great profits, which have been derived from liming. But excepting this one point, in which we cannot be misled by ignorance, or want of precision, the mass of writings on lime, as well as on calcareous manures in general, will need much sifting to yield instruction. The opinions published on the operation of lime, are so many, so various and contradictory, that it seems as if each author had hazarded a guess, and added it to a compilation of those of all who had preceded him. For a reader of these publications to be able to reject all that is erroneous in reasoning, and in statements of facts—or inapplicable on account of difference of soil or other circumstances—and thus obtain only what is true and valuable—it would be necessary for him first to understand the subject better than most of those whose opinions he was studying. It was not possible for them to be correct, when treating (as most do) of *lime* as one kind of manure, and every different form of the *carbonate of lime*, as so many others. Only one distinction of this kind (as to operation and effects) should be made and never lost sight of—and that is one of substance, still more than of name. Pure or quicklime, and carbonate of lime, are manures entirely different in their powers and effects. But it should be remembered that the substance which was pure lime when just burned, often becomes carbonate of lime before it is used, (by absorbing carbonic acid from the atmosphere,)—still more frequent-

ly before a crop is planted—and probably always, before the first crop ripens. Thus, it should be borne in mind that the manure spoken of as lime, is often at first, and always at a later period, neither more nor less than calcareous earth: that lime which at different periods is two distinct kinds of manure, is considered in agricultural treatises as only one: and to calcareous earth are given as many different names, all considered to have different values and effects, as there are different forms and mixtures of the substances presented by nature.

But however incorrect and inconvenient the term *marl* may be, custom has too strongly fixed its application for any proposed change to be adopted. Therefore, I must submit to use the word *marl* to mean beds of fossil shells, notwithstanding my protest against the propriety of its being so applied.

The following experiments are reported, either on account of having been accurately made, and carefully observed, or as presenting such results as having been generally obtained on similar soils, from applications of fossil shells to nearly six hundred acres of Coggin's Point Farm. It has been my habit to make written memoranda of such things; and the material circumstances of these experiments were put in writing at the time they occurred or not long after. Some of the experiments were, from their commencement, designed to be permanent, and their results to be measured as long as circumstances might permit. These were made with the utmost care. But generally when precise amounts are not stated, the experiments were less carefully made, and their results reported by guess. Every measurement stated, of land or of crop, was made in my presence. The average strength of the manure was ascertained by a sufficient number of analyses—and the quantity applied was known by measuring some of the lands, and having them dropped at certain distances. At the risk of being tedious, I shall state every circumstance supposed to affect the results of the experiments—and the manner of description, and of reference, necessary to use, will require a degree of attention that few readers may be disposed to give, to enable them to derive the full benefit of these details. But however disagreeable it may be to give to them the necessary attention, I will presume to say that these experiments deserve it. They will present practical proofs of what otherwise would be but uncertain theory—and give to this essay its principal claim to be useful and valuable.

When these operations were commenced, I knew of no other experiments having been made with fossil shells, except two, which had been tried long before, and were considered as proving the manure too worthless to be resorted to again. Inexperience, and the total want of any guide, caused my applications, for the first few years, to be frequently injudicious, particularly as to the quantities laid on. For this reason these experiments show what was actually done, and the effects thence derived, and not what better information would have directed, as the most profitable course.

The measurements of corn that will be reported were all made at the time and place of gathering. The measure used for all except very small quantities, was a barrel holding five bush-

els when filled level, and which being filled twice with ears of corn, well shaken to settle them, and heaped, was estimated to make five bushels of grain—and the products will be reported in grain according to this estimate. This mode of measurement will best serve for comparing results—but in most cases it is far from giving correctly the actual quantity of dry and sound grain, for the following reasons:—The common large soft grained white corn was the kind cultivated, and which was always cut down for sowing wheat before the best matured was dry enough to grind, or even to put up in cribs; and when the ears from the poorest land were in a state to lose considerably more by shrinking. Yet for fear of some mistake occurring if measurements were delayed until the crop was gathered, these experiments were measured when the land was ploughed for wheat in October. The subsequent loss from shrinking would of course be greatest on the corn from the poorest and most backward land, as there, most defective and unripe ears would always be found. Besides, every ear, however imperfect or rotten, was included in the measurement. For these several reasons, the actual increase of product on the marled land, was always greater than will appear from the comparison of quantities measured: and from the statements of all such early measurements, there ought to be allowed a deduction, varying from ten per cent. on the best and most forward corn, to thirty per cent. on the latest and most defective. Having stated the grounds of this estimate, practical men can draw such conclusions as their experience may direct, from the dates and amounts of the actual measurements that will be reported. Some careful trials of the amount of shrinkage in particular experiments will be hereafter stated.

No grazing has been permitted on any land from which experiments will be reported, unless it is especially stated.

(To be Continued.)

DOMESTIC SUMMARY

The question has been agitated in Raleigh, North Carolina, as to the propriety of calling a meeting of the inhabitants of that town and county for the purpose of adopting measures to secure an extension of the Petersburg and Norfolk rail roads to that city. The Horticultural Society of Pennsylvania held its 8th annual exhibition in Philadelphia last week, and fully sustained the former high reputation of the enterprising and scientific horticulturists and florists of Philadelphia and its neighborhood. Mr. Binney delivered an eulogium on the late Judge Marshall, in Philadelphia on Tuesday last, which is spoken of as being alike worthy of the venerable Chief Justice and the gifted author.

FOREIGN ABSTRACT.

Advices to the 23d and 24th August, have been received from London and Liverpool.

England. The corporation reform bill has been so amended in the House of Lords as to take away the saving character of the bill, and it was doubtful with Lord Melbourne whether he would go on with it or not.

Spain. The affairs of the Queen are in a most deplorable condition. The government

commands little or no respect in any quarter. The royal guard are confined to their barracks every night in readiness to meet the exigencies that may occur. "The news from Spain is more and more afflicting. At Mataro, and on different points, new popular movements have taken place to the cries of—Death to the monks! Death to the nobles! Death to the rich! Liberty for ever!

At Tarragona the lieutenant and major of the place were strangled.

Valencia has also been the theatre of deplorable excesses.

At Barcelona the proclamations become more numerous. They call the inhabitants to arms to exterminate the Carlists and sustain the popular movement."

The fiendish war upon the priests continue; almost every night adds to the list of Jesuits and monks stabbed or murdered. Liberty must be a very odd sort of a goddess to require such sacrifices.

AGRICULTURAL SCRAPS.

Profitable Crops.—The Mount Morris Spectator informs us that Messrs. George and Philo Mills, have harvested this season, from 27 acres of the Genesee Flat, lying near that village, 1270 bushels of wheat, being an average of 47 bushels of clean wheat to the acre.

Mr. Richard Dickinson, of Deerfield, Massachusetts, sold a few days since 8 acres of Broom corn, standing at \$90 per acre.

A Tobacco Competitor.—The Agricultural society of Moscow, in Russia, has awarded gold and silver medals as premiums of encouragement for the culture of American tobacco, which has perfectly succeeded in Russia.

Great Fleece.—The Greenfield, Mass., Gazette states that Mr. Lewis Austin, of Erving's Grant, has obtained in three shearings from a single ewe sheep 29½ pounds of wool, half Saxony breed.—This gives an average of exactly 9 lbs. and 12 oz.

CONTENTS OF THIS NUMBER.

Cattle Fair and Sale—Notice of Silk Manual—Berkshire Fair—A good chance for breeders—Notice of Mr. Thomson's fine Durhams—dreadful mortality among horses on the Eastern Shore—A visit to Brookland Wood, the country seat of Mr. Caton—Common Sense on judicious farming and the treatment of stock—Agricola on the culture of the Sweet Potato—A peep at the Patent office—Ruffin on Calcareous Manures—Domestic Summary—Foreign Abstract—Agricultural Scraps—Prices Current, &c.—Advertisements.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured....	pound.	11	11½
Shoulders,.... do.....	"	10	—
Middlings,.... do.....	"	10	—
Assorted, country,.....	"	9	9½
BUTTER, printed, in lbs. & half lbs.	"	18½	25
Roll,.....	"	—	—
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old....	each.	3 00	6 00
COWS, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100 lbs.	1 94	2 00
CHOP RYE,.....	"	1 62½	1 75
EGGS,.....	dozen.	—	—
FISH, Shad, No. 1, Susquehanna,.....	barrel.	7 75	—
No. 2,.....	"	6 75	—
Herrings, salted, No. 1,.....	"	4 25	—
Mackerel, No. 3,.....	"	4 50	—
Cod, salted,.....	cwt.	2 25	2 75
LARD,.....	pound.	10	10½

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM.	TO.
BEANS, white field,.....	bushel.	2 50	—
CATTLE, on the hoof,.....	100 lbs.	5 00	6 00
CORN, yellow,.....	bushel.	85	90
White,.....	"	85	90
COTTON, Virginia,.....	pound.	18½	—
North Carolina,.....	"	—	—
Upland,.....	"	18½	20
FEATHERS,.....	pound.	37	40
FLAXSEED,.....	bushel.	1 25	1 37½
FLOUR & MEAL—Best wh. wh't fam.	barrel.	7 50	8 00
Do. do. baker's,.....	"	7 00	7 50
Do. do. Superfine,.....	"	6 25	6 50
SuperHow. st. in good de'd	"	6 25	—
" wagon price,	"	—	6 00
City Mills, extra,.....	"	—	6 37
Do.	"	—	6 25
Susquehanna, firm & scarce	"	—	6 25
Rye,.....	"	4 75	5 00
Kiln-dried Meal, in hhds.	hhd.	19 00	21 00
do. in bbls.	bbl.	4 50	4 62
GRASS SEEDS, red Clover,.....	bushel.	5 00	5 50
Timothy (herds of the north)	"	2 75	3 25
Orchard,.....	"	2 25	3 00
Tall meadow Oat,.....	"	2 00	2 50
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.	—	15 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	8
Hogs, on the hoof,.....	100 lb.	7 00	7 25
Slaughtered,.....	"	—	—
HOPS—first sort,.....	pound.	12½	—
second,.....	"	10	—
refuse,.....	"	8	—
LIME,.....	bushel.	33	35
MUSTARD SEED, Domestic,.....	"	5 00	6 00
OATS,.....	"	32	34
PEAS, red eye,.....	bushel.	—	—
Black eye,.....	"	—	1 25
Lady,.....	"	—	—
PLASTER PARIS, in the stone,.....	ton.	—	3 50
Ground,.....	barrel.	1 25	—
PALMA CHRISTA BEAN,.....	bushel.	2 00	—
RAGS,.....	pound.	3	4
RYE,.....	bushel.	70	73
Susquehanna,.....	"	none	—
TOBACCO, crop, common,.....	100 lbs	4 50	5 00
" brown and red,....	"	5 00	7 00
" fine red,.....	"	7 00	9 00
" wrappry, suitable	"	—	—
for segars,.....	"	5 00	10 00
" yellow and red,....	"	8 00	12 00
" yellow,.....	"	9 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"	4 00	—
" ground leaf,....	"	5 00	8 00
Virginia,.....	"	5 00	10 00
Rappahannock,.....	"	—	—
Kentucky,.....	"	8 00	14 00
WHEAT, white,.....	bushel.	1 30	1 35
Red,.....	"	1 20	1 28
WHISKEY, 1st pf. in bbls,....	gallon.	37	37½
" in hhds,....	"	35	dull
" wagon price, }	"	33	33½
WAGON FREIGHTS, to Pittsburgh,.....	100 lbs	1 50	—
To Wheeling,.....	"	1 75	—
WOOL, Prime & Saxon Fleeces,...	pound.	62 to 75	32 to 34
Full Merino,.....	"	52	62 30 32
Three fourths Merino,.....	"	47	52 28 30
One half do.....	"	42	47 26 28
Common & one fourth Meri.	"	38	42 25 25
Pulled,.....	"	38	42 26 28

VALUABLE STOCK FOR SALE.

A FULL-BRED Durham short horn yearling BULL, a very superior animal; a 7-8 blood, same age; also two COWS, 4 years old, 3-4 blood, in calf by a full-bred Bull. Pedigrees given in full. Applications for any of the above cattle to be made to the Editor of the Farmer and Gardener, by whom the terms will be made known.

Letters from a distance must be post paid, June 30th.

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank, par	VIRGINIA.
Branch at Baltimore,....do	Farmers Bank of Virginia, 3a
Other Branches,.....do	Bank of Virginia,.....do
MARYLAND.	Branch at Fredericksburg do
Banks in Baltimore,.... par	Petersburg,.....do
Hagerstown,.....3a	Norfolk,.....do
Frederick,.....do	Winchester,.....do
Westminster,.....do	Lynchburg,.....do
Farmers' Bank of Mary'd, do	Danville,.....do
Do. payable at Easton,....do	Bank of the Valley,....do
Salisbury,.....5 per ct. dis.	Branch at Romney,....do
Cumberland,.....3a	Do. Charlestown,....do
Millington,.....do	Do. Leesburg,.....do
DISTRICT.	Wheeling Banks,....1a2
Washington, } Banks, }	Ohio Banks, generally 3a3
Georgetown, } Banks, }	New Jersey Banks gen. 1a2
Alexandria, } Banks, }	New York City,.....4a
PENNSYLVANIA.	New York State,....2a3
Philadelphia,.....1a	Massachusetts,....2a2
Chambersburg,.....2a	Connecticut,.....2a2
Gettysburg,.....do	New Hampshire,....2a2
Pittsburg,.....1a2	Maine,.....2a2
York,.....1a	Rhode Island,....2a2
Other Pennsylvania Bks. 1a2	North Carolina,....3a4
Delaware [under \$5],....3a4	South Carolina,....2a3
Do. [over 5],.....3a1	Georgia,.....4a5
Michigan Banks,.....5a	New Orleans,.....do
Canadian do,.....5a	

FULL BLOODED IMPROVED DURHAM SHORT HORNED CATTLE FOR SALE.

THE subscriber, will dispose of at private sale, part of his DURHAM CATTLE, which have been bred by himself from the best blood of Mr. John Hare Powel's stock imported from England and selected by Mr. Coates from the fold of J. Whitaker, to whom a standing order had been given by Mr. Powel to obtain the best animals, without limitation as to price.

1st. CALISTA, purchased from Mr. John H. Powel, got by Malcom, 6 years old this month, dam Maria, imported in 1827—Malcom imported in 1825 (bred by J. Whitaker) got by Enchanter, dam, Western Lady, &c.

2d. MARIA, 4 years old next January, got by Orlando, purchased at Mr. Powel's sale for \$300, when eleven months old, got by Malcom, dam, Zenobia, imported in 1828, and purchased by Dr. Thomas of Md. when seven years old for \$400.

3d. ZENOBIA, 2 years old last April, got by "Orlando," dam, Calista.

4th. ROMF, one year old April, got by Robt. Y. Stokes' bull "Pizarro," purchased of Mr. Barnitz of York, Pa., dam, Calista.

5th. GALLANT, 1 year old last May, got by Pizarro, dam, Maria.

6th. A FEMALE CALF, four months old, got by Pizarro, dam, Calista.

7th. A MALE CALF, 1 month old, got by Pizarro, dam, Maria.

The above described stock may be seen at my residence about four miles from Frederick, on the Liberty road.

sep 29 2t WM. J. THOMSON.

APPRENTICES WANTED.

TWO boys of good families and morals, from the country, will be taken as apprentices to the Potting business. They will have an opportunity of learning both the fine and coarse branches of the business, under the instruction of first rate workmen, and their parents may rest assured that every attention will be paid to their morals.

JAMES E. JONES, Gay street,

sep 25 East Jones' Falls.

OYSTER SHELL LIME.

ORDERS for any amount of the above valuable article will be received and promptly filled if left at this office. The incalculable value of lime as a manure is so well known that it is useless to dwell upon it in this advertisement. It will be delivered at any convenient landing place on the Chesapeake bay or its tributary waters, which may not be more than 70 miles distant from Worton Creek, Kent county, at 8 cents per bushel. Unburnt shells delivered at 4 1/2 cts. per bushel.

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THE SUBSCRIBER offers for sale at the Maryland Agricultural Repository, Light street, a large and general assortment of

PLOUGHS.

The Self-Sharpening Plough possesses the advantage of having a moveable steel point, from fifteen to twenty-four inches long, which can be reversed, as a bevel is formed by wearing, and advanced as it becomes shorter, so as to bring into actual wear from twelve to eighteen inches of solid wrought bar; by thus changing the point, the share continues to perform its work well until worn off nearly up to the mould board; whereas, without this moveable point, shares are generally rendered useless when only half worn.

This valuable principle may be applied to any shape of mould board.

SELF-SHARPENING.

- No. 00. The smallest size is a 7 inch seed and cultivating plough price \$5 00
- No. 0. A one-horse cultivating plough, 8 inches wide, nearly the same length as the smaller one, but has a bolder mould board, and better adapted to sandy lands. The shares and heels of these two sizes suit each other - 5 25
- No. 1. A light two-horse - 6 25
- " 2. A two horse plough, 9 inches wide - 7 00
- " 3. A two-horse flushing plough - 8 00
- " 4. A heavy three-horse plough with sword coulter - 12 00

WOOD'S PATENT.

- No. 21. A seed and cultivating plough, 8 inches wide, with cast share - 5 00
- Corn. A one-horse plough, with wrought iron standard and cast share - 5 50
- No. 1. A. Is a light two-horse plough, 9 inches wide - 6 50
- " 12. A two-horse plough, with sword coulter and cast share, a superior flushing plough - 8 00

The above ploughs of Wood's Patent are entitled to two extra shares each, at the above prices.

SINCLAIR & MOORE'S IMPROVED.

- 6 inch. A superior seed plough, with cast shares 4 50
- 7 " A one-horse ditto ditto 5 00
- 8 inch. A light two-horse plough, with cast shares 5 50
- 9 " A two-horse ditto ditto 7 00
- 10 " A two or light three-horse plough, with sword coulter and cast share 9 50
- 10 " A three-horse plough with wrought share 10 00
- 10 " A three-horse plough with sword coulter, a superior flushing plough, made both right and left handed 11 50
- 12 " A heavy three-horse plough, with sword coulter 14 00

M'CORMICK'S PATENT.

- 7 inch. One-horse wrought shared plough 5 00
- 8 " Light two-horse ditto ditto 7 00
- 9 " Two-horse plough, with sword coulter 9 50
- 10 " Three-horse plough, with coulter 11 50
- 12 " Heavy three horse plough, with coulter 14 00

BAR-SHARE.

- No. 1. Is a 7 inch plough, with wrought share and lock coulter - 6 25
- " " Is a 7 inch plough, without coulter - 5 00
- " 14 A one-horse plough, with wrought share and coulter - 7 00
- " 2. A light two-horse plough, with wrought share and coulter - 8 00
- " 3. A two-horse plough, with wrought share and coulter - 9 50
- " 34. A heavy two-horse plough, with wrought share and coulter 10 00
- " 5. A heavy three-horse flushing plough, with wrought share and coulter - 13 00

HILL-SIDE.

- A plough suited to two horses, with cast share, changes with ease, so as to throw the furrow to the right or left 10 00

SHOVEL-PLOUGH.

- Wrought shares 4 50

CARY-PLOUGH.

- No. 1. A one-horse plough, having nearly the form of mould board as the well known Cary or Dagon plough, but has a cast iron mould board and wrought share. The mould board is bold, opens a wide furrow, does clean work, and is very

strong and simple in its construction 5 00

- No. 2. A light two-horse plough of the same construction. - 6 50

BUFFALO PLOUGH.

- No. 1. H. A one-horse plough, with cast share 5 00
- No. 1 1/2 H. A two-horse plough, with cast share 8 00
- " 2. H. Heavy two-horse ditto, - 9 00

The form of the mould board of these improved ploughs, is somewhat on the principle laid down by Thomas Jefferson, but varied so as to equalize the pressure on the mould board, as observation in the practical use has directed.

DOUBLE MOULD BOARD.

Two sizes; a very useful plough for cultivating potatoes, &c. and for ploughing up potatoes at the time for gathering the crop. Price \$7 00 to 10 00

EXTRA CASTINGS FOR PLOUGHS.

Together with several new patterns, which will be sold low.

CULTIVATORS.

- Those with five wrought tines, of the most approved shape - 5 25
- Five tines, of more simple form - 5 00
- Cast tined - from 3 50 to 4 00
- If made to expand, 50 cents additional.

WHEAT FANS.

- Improved - \$24 00 to 25 00
- Ditto extra large - 28 00
- Ditto ditto recent improvement - 33 00
- Common Fans - 19 00
- Box Fans, small size - 15 00

STRAW CUTTERS.

- 20 inch. Cylindrical straw cutter, suited to horse or water power, capable of cutting from 75 to 100 bushels per hour 75 00
- Extra knives per set - 6 00
- 14 " Box same construction, suited to manual power - 45 00
- Extra knives per set - 5 00
- 11 " Box - 27 00
- Extra knives per set - 4 00

These machines are self-feeders, the knives are of spiral form, and act on the bed steel in such a manner as to cut with great ease without a very keen edge: many thousand bushels have been cut with them without sharpening the knives.

- Common Dutch straw cutter with treadle - 7 50
- Ditto without treadle - 5 00

CORN SHELLERS.

Of the various kinds offered to the public, the one generally preferred is that with a vertical iron wheel with spring holders, which adapt themselves to any sized ears. There is no machine more certain to answer the intended purpose; they are very durable and easily kept in order, and will shell from 15 to 20 bushels per hour by hand, and are now sold at the reduced price of \$19 00, with a discount of five per cent. if cash be paid.

JAMES MOORE,

Sept. 1 Successor to SINCLAIR & MOORE.

DURHAM STOCK.

A gentleman about to emigrate to the South, will dispose of three superior animals of the improved Durham Short-Horn breed, the one a bull rising 4 years old, a cow between 9 and 10 years old, and her bull calf 3 months old on the 1st September, instant. The bull was raised by Dr. Pool, of New Brunswick, Maine, got by imported thorough-bred Bishop, by Wellington—out of a thorough-bred imported cow, called Maria; the cow is imported, and is a beautiful animal, having every mark and point of a thorough-bred, her colour white ground with red flecks and spots; she has given from 6 to 8 gallons of milk per day. Her calf now three months old, is also a most beautiful animal, partaking of the marks and points of his mother; he was got by the first named Bull. As the owner is anxious to sell, a bargain may be had on early application.

Letters concerning the above cattle, post paid, directed to the editor of this paper will be promptly attended to.

DEVON BULLS.

FOR SALE—Two full blood Devon Bulls. The first is a beautiful animal, 9 years old, of the purest blood and fine form, raised by one of the first breeders in the country; the other is a fine young animal, 1 year old, got by the above, out of a first rate Devon Cow. These animals will be sold on reasonable terms, their superior qualities being considered. Enquire of the Editor.

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THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 23.

BALTIMORE, MD. OCTOBER 6, 1835.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, OCT. 6, 1835.

SILK MANUAL.

The proprietors of the *Farmer and Gardener*, Baltimore, have in the press, and will speedily publish, a complete *Manual of the Mulberry and Silk culture*, compiled from the best and most authentic sources. As the object is the promotion of a great public interest, the cost will be moderate.

GREAT CATTLE SALE.

Our *Stock Fair and Sale*, which we advertise in this day's paper, we respectfully beg leave to commend to our agricultural readers, and to farmers and planters generally. The advantage to the agricultural community of having a great mart, to which they may annually resort with a certainty of disposing of such fine animals as they may have, or of purchasing such as they may want, will be obvious to every one. The present essay to effect this desirable object, has been prompted more by a wish to render ourselves serviceable to those with whom our interest is identified, than with any view of realizing much profit. If our plan should find favor with those whom it is intended to benefit, we hope hereafter to make our *Annual Cattle Fair and Sale*, a cherished and common ground, whereon gentlemen breeders from the eastern, western, middle and southern states, may meet in a spirit of enlightened emulation, and produce the living evidences of their skill in the interesting science of improving the breeds of domestic animals. The location of Baltimore is a most happy one for such an enterprise, nor is the ground selected for holding the fair less so, offering as it does, every convenience that could be desired for promoting the comfort of the animals and the accommodation of visitors.

The communication of Mr. Dunlop is replete with valuable information upon the subject of the

too much despised Ribwort. We regret that his specimens never reached us.

The communication, No. 2, of the series of our correspondent "*Common Sense*," on the subject of *soiling, fattening of Hogs*, and the *treatment of Cattle*, is, indeed, an admirable illustration, that its accomplished author understands the meaning of his cognomen. It is emphatically "*common sense*,"—strong, manly "*common sense*,"—dressed in its best, because, simplest attire—"*common sense*" replete with the true philosophy of nature.

AGRICULTURAL FAIRS, CATTLE EXHIBITIONS AND SALES.

Our exchange papers from the West, are filled with accounts of the meetings of Agricultural Societies, the formation of others, and with Agricultural Fairs. In Kentucky, Ohio and Indiana, the spirit may, indeed, be said to be abroad that will carry them in triumph to the attainment of perfection, not only in their systems of husbandry, but in the improvement of their breeds of cattle. Such a spirit is eminently praiseworthy, and must lead to the best and happiest results, in adding greatly to the comfort of the enterprising people of those states, besides largely increasing their political power. The Agricultural Fair which has just closed at Cincinnati, Ohio, is represented as one of peculiar attractions, and to have justified every wish of the warmest and most sanguine friends of that cause—whose "*conquests*," in the eloquent language of Mr. Storer, "*are bloodless*"—"where all are conquerors, though the palm may be taken by one alone."

In the East and North, the good work goes bravely on. At Albany, New York, on the 13th and 14th instants, there is to be a splendid Agricultural Fair,—and at Brighton, Massachusetts, on the 14th, there will be a Cattle Show and Sale of Animals, as also, a distribution of premiums.

These things are as they should be. We view them as highly honorable to the parties engaged in them, and would hope, that examples so laudable—so grounded in the very principles of human ambition and human happiness—will be followed, that they may raise up friends in all directions.

The *Improved Short-horn Durham Cattle*, advertised by the Hon. Charles A. Barnitz, of York, Pennsylvania, for sale, in this day's paper is worthy of all possible attention. Distinguished as he has been for years, as an enlightened agriculturist and breeder, his stock always command the most marked consideration. His cow *Flora* is very happily designated by him as an "*extraordinary cow*," for extraordinary must that cow be, which will yield from 16 to 20 lbs. of butter per week.

While we take especial pleasure in calling public attention to his advertisement, we must be indulged in the expression of our unfeigned regret, that one so peculiarly qualified by his attainments to dignify the science of agriculture, should retire from its pursuit, in the midst of a career rendered no less brilliant by its results, than it has been eminently useful to our common country.

We have read with much edification and delight, the address delivered before the Hamilton county Agricultural Society, at Carthage, Ohio, on the 4th ultimo, by *Bellamy Storer*, Esq. Its historical facts, statistical information, and classic allusions, all tend to render the production deeply interesting to the reader of taste. We are always gratified when we see men of moral elevation, of professional distinction, like Mr. Storer, stepping forward and proclaiming in the language of eloquence and truth, the beauties and the blessings, the comforts and the luxuries, which belong to the life of the husbandman.

A JAUNT TO SURREY FARM.

We spent a part of an afternoon, some days since, at *Surrey Farm*, the residence of Captain *Abel S. Dungan*, about two miles from town, in an eastern direction, and were highly gratified to find that the gallant Captain makes as skilful a farmer as he did a navigator. This farm is the beautiful estate formerly owned by the late Mr. David Harris, president of the branch of the old Bank of the U. States, afterwards by his son in law, the late Col. Joseph Sterett, and more recently by Mr. Silas Marean. The entire farm at present consists of 281 acres of land, 90 of which are in wood, and the balance in cultivation. The mansion house is a commodious frame, 80 feet front, by 40 in depth, built with due regard to beauty

comfort, convenience and durability. It has two fronts, the southern, with its balcony, commanding a fine view of the river and bay, and opening upon a most splendid location for a falling and ornamental garden. The northern front presents the appearance, at a distance, of some ancient castle with its turreted battlements, and if situated in the land of barons, in another age, would be taken for the home of some hardy chieftain, who feared dishonor more than death. It was built for Mr. Harris, we understand,—a gentleman of the old school,—who, with ample means and a heart to enjoy them, made Surrey Farm at once the seat of elegant refinement and generous hospitality. The northern front looks out upon the lane from which the premises are approached, and has, enclosed, a *Court-yard* delightfully shaded with forest and ornamental trees. In the same enclosure with the garden, about two hundred yards from the mansion, there is a tastefully constructed building, with its tassellated marble floors, that answers for the two-fold purpose of a bath-house and wash-house, both of which are supplied from a contiguous never failing spring of excellent water.

The out houses are cut off from the dwelling by a lane running at right angles, and consist of a tool-house, ground feed house, quarters for the servants, hen house, smoke house, ice house, dairy, barn, stables, cow house, &c.

The dairy is supplied with water by a pump in the barn yard, by means of a tunnel. The water after passing through the dairy, is conveyed by a second tunnel into the hog-pens, a few yards distant, so that without extra labor both establishments are supplied with water.

In a wing of the barn, which is spacious, the Captain has a 4 horse power thrashing machine, of which he said so many excellent things, that, had we not been a believer in its utility before, we should most assuredly have become a convert. He told us that he got out 150 bushels of grain a day with it, with perfect ease; that he had passed through it 3,200 bushels, and but for an oaken root which got in it, it would have performed its work without the least injury whatever. As it was, the only one it received was the loss of two teeth. He procured it he said of Sinclair and Moore, and would not be without it for any consideration; that it had enabled him to get out his wheat timely, so as to obtain a good price for it—a *dollar and a half a bushel*.

His crop of wheat the present season was a good one, and gave strong evidence of what may be done by *lime* and good culture. The land of *Surrey*, is not what might be called first rate, its

ample fields have good exposures, and its soil is what farmers term *kind*; that is, land which promptly yields to the influence of manure, and speedily gives evidence by its grateful returns of the melioration effected. On less than 60 acres the Captain reaped 1465 bushels of fine heavy wheat; it was grown on two fields, the average of the one, was 30 bushels, that of the other, 27 bushels to the acre. We are the more particular in mentioning these facts, because this bountiful yield was the result purely of proper culture, and shows conclusively how much may be done with a judicious application of calcareous manures.

The farm is divided into eleven fields. The orchard consists of 10 acres of choice apples; but we regretted to find that the Borer was making very unceremonious work with his young trees, one of which the Captain pointed out to us that had been entirely bored through, and which, on his attempting to straighten it had broke off near the ground; several others were more or less injured, and some three or four entirely killed.

To destroy these insects, various plans have been recommended, two of which we will here mention.

1. *Professor Say*, recommends that common bricklayer's mortar be applied around the base of the trees, the latter part of April or early in May, so as to cover completely the part, and its immediate vicinity.

2. *John Prince, Esq.*, recommends "digging round the tree, and clearing the earth to the roots, and then with a sharp pointed knife, a chisel or gouge, and a small wire to probe; if they are deep in the tree, they may be easily destroyed." "After taking out the worms, the wounds should be covered over with grafting clay and a large proportion of wood ashes mixed, and the earth then to be returned to the tree." This latter process should be performed as soon in the spring as the frost is out of the ground.

The *Corn* occupied a field of 20 acres and looked remarkably well, and judging from the massy appearance of the *ears*, we think it will yield from 8 to 10 bbls. to the acre.

The grass fields consisted of clover and timothy, and we found the Captain busy in preparing his grounds for wheat and timothy, in which, together with what he has already in, he means to put between sixty and seventy acres. He had a field of twenty-four acres in which the timothy was already up and looked well, 20½ acres of this was sown in the corn and the other 3½ on newly prepared fallow. A field of 16 acres which has been 2 years set in timothy looked as if justice had been done in its sowing, and that the seed had not been cast on barren sands.

The farm is well watered, a stream passing through nearly all the fields, yielding a plentiful supply 10 months in the year, and in the others there are fine springs of water which never flinch, come what may, in giving copious streams of excellent water.

Besides grain, the Captain has a large market garden, the receipts from which added to those from his dairy brought him in, \$200, monthly, from the month of May to August.

We were much pleased with three fine *Devon* Bulls which he has, the oldest now 9 or 10 years old, is remarkably large, as were the two younger ones, their ages being considered.

His milch cows are composed of about an equal number of *Devon* and common cows; but he has become so thoroughly convinced of the great superiority of the *Devons*, for the purposes of the dairy, that he means to dispose of all his others and keep none but them on his estate.—From one of his fine *Devon* cows, he made during the latter part of the Spring, from 9 to 10 pounds of butter a week.

On the whole, we were highly gratified at our jaunt, and hope that every gentleman owning a farm convenient to the procurement of *lime*, in some of its forms, will take courage from the flattering results of its application to the *Surrey* farm, and give it a fair trial on their several estates. With lime, marl, ashes, clover and plaster, there is no land that may not be made to produce from 20 to 40 bushels of wheat to the acre.

WORK FOR OCTOBER.

ON THE FARM.

There is much to be done this month and the next towards securing the crops of the coming year. If you have any stiff clayey ground that you contemplate putting in corn, oats or any other crop requiring spring sowing or planting, turn it up deeply, and leave the furrow in the rough to receive the fertilizing influence of the winter frosts and snows. By fall ploughing, in addition to the meliorating effect upon the land, much time is gained in the spring, at a period, when, if you have not been kind in your treatment to your horses and oxen, they are very apt to be low in flesh, feeble in strength, and but ill suited to the arduous labor of breaking up stiff grounds.

Wheat. If you have not already gotten in your wheat, it is time you were bestirring yourself. It should, at all events, be sown before the 20th of the month. If you contemplate sowing on a clover lay, you should plough but once, harrow in your seed, and roll. If not upon a clover lay, plough two or three times and pulverise perfectly. We need scarcely say to you, that you

should be particular in your seed; that it should be selected with the utmost care; that you should not sow more than two years in succession from the same seed, and that when you do change, it should be obtained from a situation *north* of your own. Before sowing, the wheat should be carefully passed through a screen to separate it thoroughly from all noxious seed and extraneous matter; it should then be *washed* or *scrubbed* with a hickory or birchen broom, the water to be poured off and renewed whenever it is discolored, the floating grains skimmed off and given to the cattle or hogs: after it has undergone this process, soak it for twenty four-hours in a *solution of lime and water*; a *strong solution of salt and water*, or *ley made from wood ashes*; drain it, roll it in plaster, and sow in the proportion of from $1\frac{1}{2}$ to 2 bushels to the acre, harrow it in *deep* and roll: if you have not previously done so, don't omit to give your land a dressing of *lime, marl, or ashes*, just before harrowing. In the spring if you were to turn your sheep in, in *dry weather*, to eat down the wheat, and then pass your harrow over it, you would find your interest in it by the increased vigor of its growth and more abundant yield.

If you design to put your wheat field into timothy, you cannot do better than to sow it immediately after harrowing, and then roll in your timothy seed.

If your *rye* is not already in, sow it without delay—light gravelly or stony land suits it best; but you must not neglect to give it a good dressing of manure. Sow from 5 to 6 pecks to the acre, being careful to steep your seed as directed for wheat.

While on the subject of *rye*, permit us to obtrude once more upon your attention, with our *petition* in behalf of your milch-cows. Sow down one, two, or three acres, for early food. It is the earliest grass in the spring, is an excellent promoter of milk, may be cut two or three times, and will ensure you flowing pails and delicious butter, ere the other grasses can be fed from.

Your *corn*, as soon as it is sufficiently hardened, you should gather and transfer to your corn-house or cribs. Your *corn husks*, as separated from the ear, if stacked away with equal portions, or alternate layers of hay and straw, each layer to be sprinkled with salt, would make most acceptable food for your cattle, the whole to be submitted to the process of cutting.

Your hogs if in pasture, or indulging in the luxuries of the woods, must be penned for fattening, and if you would economise time and feed, let your roots be boiled and your corn or other

grain ground into meal—give them plentiful supplies of straw or leaves, and they, in return, will give you ample stores of manure.

Harvest your potatoes. Towards the latter end of the month take up your beets, carrots, parsnips, and other roots that require to be removed, and be sure that you place them in situations where there will be no danger of their freezing. *Attention to this now*, will save vexation and loss hereafter.

IN THE KITCHEN GARDEN.

Your *spinach* must be weeded out to the distance of five or six inches: unless kept clean from weeds and foul grass, the plants will rot off.

Transplant your *lettuce* plants into warm rich borders—as also some into frames for winter use.

Plant out your *cabbage plants*, and *cauliflowers*: hoe up your *broccoli*: tie up your *endives* for blanching.

Asparagus. As soon as the stalks of your asparagus turn yellow, cut them down close to the earth, and carry them to your dung heap; clean the beds carefully from weeds, eradicating them effectually and drawing them into the alleys. Give the beds a top dressing of good manure—the dung of the old hot-beds, or well rotted stable manure, will either answer,—to be laid over the beds two or three inches deep; after which, stretch a line, mark out the alleys; dig the alleys one spade deep, spread a considerable portion of the earth evenly over the beds: let the weeds which were raked into the alleys be dug into the bottom of the trenches and covered a proper depth with earth; straighten the edges of the beds, giving them a moderate rounding—fill up the alleys with straw or old litter, trample it well down. Give your seedling asparagus also a slight dressing.

Earth up your *cellery*: trim your *aromatic and medicinal herbs*, as *lavender, thyme, hysop, winter savory, sage, &c.* continue to sow every ten or fourteen days, *cresses, radish, lettuce, &c.* The seeds of the *sea-kale* and *rhubarb*, should also be sown, plant out *shallots, chives, garlic* and *Rocambole*, as also seed *onions*.

If you have not transplanted your *strawberry* beds, you may still do so, taking care to *press the earth* well about the roots, and when the winter sets in, cover the beds with long manure.

IN THE FLOWER GARDEN.

Plant out your *Dutch bulbs* any time from the middle of this month to the beginning of November, as *crocuses, hyacinths, tulips, polyanthus*, and *Italian Narcissus*, Jonquils: plant the *Pyrus Japonica, Anemones, Paeonies, Primroses,*

Daises, &c. Roll your gravel walks. After you shall have planted your bulbs, give your garden a thorough cleaning. Remove the decayed flower stems or haulm; trim off your borders. Dig up your beds intended to be planted out in shrubs next spring—two feet deep at least, and when you shall have done this, look about you and see to what else you can profitably turn your attention.

AGRICULTURAL SOCIETIES.

There is so much good sense, so much truth, and so much genuine patriotism in the subjoined paragraph, which we copy from the *Indiana Aurora*, that we take pleasure in laying it before our readers. Although intended as local, it is equally as applicable to most other parts of the country as to the one for which it was written. In our state, for instance, the whole western shore is without a society, and why it should be so, is the more astonishing, as every farmer with whom you converse will acknowledge the benefits derived from the one which existed a few years since, and conferred so much benefit upon the state, and regret that it has not being at the present time; and yet no one will step forward to set the ball in motion to create a new one! There are many other parts of our widely expanded country in the same situation, to the great injury of the farming and planting interests, and while we sincerely regret the prevalence of such a withering apathy, we indulge in the hope that a sense of their interest, as well as a just pride of state, will urge gentlemen to come forth and concentrate individual action in the premises.

"Agricultural Societies.—Associations of this kind, properly conducted,—tend powerfully to promote the interest of agriculture. Not only by this means, does *each* become possessed of the knowledge of all, but all are stimulated to enlarge their stock of knowledge, by multiplying experiments, extending their researches, increasing their diligence, and the like means. The generous competition witnessed at their exhibitions, excites a laudable emulation, which never fails to manifest itself in new modes of culture, in improved breeds of live stock, and in the excellence of all that belongs to the noble art of husbandry. You shall find almost universally, that in a vicinity where suitable encouragement is given to a society of this kind, there are found the finest horses, cattle, hogs, sheep, and all domestic animals. And there you find the largest crops, the finest fruits, the best cultivated farms, and the most *ru-ral taste*.

With advantages like these in view, and a thousand others along with them, is it not astonishing that the farmers of Indiana, and the professed lovers and patrons of agriculture, should allow our county agricultural societies, to die, or at least, to live only in a sickly and declining condition. There is utterly a fault among us in this matter

somewhere, perhaps every where. But really it is hoped, that we will cast off our indifference, and raise to action in this important and interesting concern. Let us not be content to be ever in the rear of our enterprising neighbors, and to follow tardily on in the wake of more spirited and aspiring farmers; but rather let us be emulous of setting an example worthy of imitation by our senior neighbors."

In another article in the same paper, the enlightened editor holds the following appropriate language with respect to the beneficial influence of *agricultural fairs*. He is speaking of the fair of the Hamilton County (Ohio) Agricultural Society, which has been subsequently held with such decided eclat at Cincinnati. The secretary of that society having sent him a circular containing the rules of the fair, lists of premiums, &c. he makes the following comments:

"From this advertisement, we perceive, that the premiums offered by the society on horses alone, amount to more than \$500; those on cattle, near \$300; and others in proportion. The number of members is three hundred and seventy-five, who pay an annual subscription of \$3 each. This society has been of incalculable advantage to the Miami valley, and the western country generally. Were a society of equal zeal and enterprise, in proportion to population, sustained in each county in our State, the aggregate benefit to the country would be immense. The improving influence of this society is so well understood now, that whoever wishes to procure the finest horses, cattle, sheep, or swine, to be found in the western country, goes to the annual fair of the Hamilton county Agricultural Society, with certainty of accomplishing his object. And it is well known, that the live stock, and other articles of exhibition, at their fairs, will bring from 100 to 500 per cent. more, than our common neglected varieties of animals and product."

[For the Farmer and Gardener.]

SIR JOHN SINCLAIR.

On looking over a file of letters, directed to the subscriber lately, I noticed one from the *Right Honorable Sir John Sinclair, Bart.*, dated 133 George-street, Edinburgh, giving an interesting account of his persevering labors in compiling the *Code of Agriculture, a Code of Health and Longevity*, as also a *Code of Political Economy*; the latter then on hand,—some of which being very voluminous,—had been attended with great labor. In speaking of the good effects of his *Book of Health and Longevity*, he observes:—"In a personal point of view, the author can never regret having accumulated a mass of information, which has so essentially contributed to promote and confirm his own health; and which has enabled him on the verge of eighty years, to continue his literary pursuits." The above work is comprised in one volume, and would no doubt be a valuable article for every family to be in possession of.

When reflecting on the labors of this great and good man, and the immense benefit he has conferred on his own, as well as other countries, I have often thought that an account thereof might

encourage others by seeing how much good it is possible for one man to do, when he applies himself diligently to the promotion of useful objects.

Sir John being possessed of a large landed estate, turned his attention very early to the improvements of the same. And from an apprehension that the agriculture of Great Britain was in a low state*, determined on a tour through the best improved districts on the continent of Europe, for the purpose of obtaining information relative to agriculture, by which he no doubt obtained much that was valuable on many important points, which he has since freely communicated to the public. And immediately on his return made such representations to his government, as induced them to pass a law establishing a Board of Agriculture, and appointed him president of the same, with a liberal, annual, appropriation of money, to be at their disposal to be offered as premiums, &c. to the most scientific improvements in agriculture. This being placed in good hands, laid the foundation of the present high state of agricultural improvement in England, so strikingly evinced by their stock of *domestic animals*—the highly cultivated fields in every direction, surrounded by imperishable live fences, and protected by artificial belts and groves of trees; and to the same cause may we ascribe the fact, that the mansions and cottages are every where in that country, judiciously decorated with plantations of ornamental trees, shrubs and flowers, both for beauty of effect and usefulness. The laudable emulation at improvement, has, to some small extent, spread into this country, and would be far more extensively diffused amongst us, if our state legislators had been as liberal in their appropriations of money, as those of Great Britain were to their agricultural society; for without money no such society can exist, and a sufficiency is not easily and annually raised by private subscriptions. But if our state legislature were to encourage agriculture by liberal and annual appropriations, to be placed in proper hands, it would be like money loaned out at large interest; for it would give life to such a healthful state of industry, and so stimulate individual exertion, as to add to the prosperity, wealth and beauty of the country, in a ratio which would expand the resources of the state, and increase its political importance among the other states of the Union.

A case in point follows:—It was by promoting such measures as these, that the most celebrated statesman of modern times, justly called Fredrick the great, (more from his attention to internal improvement than to foreign conquests,) raised his dominions, notwithstanding their disadvantages of situation, soil, and climate, to that height of prosperity and power to which they attained during his reign; his practice was to lay out about 300,000 pounds sterling per annum, in the encouragement of agricultural improvements, which he considered as manure spread on the ground to secure an abundant harvest; and in fact, instead of being impoverished by such liberal grants, he thereby increased his revenue so much, that he was able

*Not quite so low I suppose as it was when respectable farmers had neither fire-places nor feather beds in England.

to leave a treasure behind him, amounting to $\pm 12,000,000$ pounds sterling.

So by the labors of this great agriculturist and financier, England and Scotland, have got their commons and waste lands, to a great extent, into a high state of cultivation, their swamps and marshes drained, and rendered at the same time healthful, productive and handsome, and their stock of domestic animals doubled in value, by which, other countries have been highly benefitted by the worthy example set them.

ROBERT SINCLAIR.

†See Sinclair's Code of Agriculture.

[For the Farmer and Gardener.]

No. II.

SOILING—FATTENING OF HOGS.

On the mode of supporting animals adopted by some cultivators of the earth, usually termed "*soiling*," much has been advanced favorably to it; but has received also loud objections in return. A nation not excelled by any other, for a judicious and *productive system* of cultivating the earth, rests that whole system on it, and to it well conducted, owe their decided superiority in production. I am induced to believe from a fair experiment made, and firmly conducted, that all the objections to this mode of supporting animals might be readily got clear of, by advancing and going on one single position, that I have been so fortunate as to see laid down as the *basis of a system of "soiling,"* but which I am compelled to believe would suit all *climates* and *situations*. Let the mode of "*soiling*" be so conducted, as not to violate the great "*laws of nature*," as regards the *animal soiled*.

In the rearing and fattening of the *cow* kind, I have fixed on this ground, as absolutely necessary to be recollected and observed, viz:—that nature so constituted that animal, that a "*variety of food*" is *essentially necessary* to the proper action of the animal functions, of course *high health*; consequently, a *capacity to grow and fatten* kindly. I am assured that in determining the most *economical* and *profitable* mode of producing both results, to be perfectly successful, this point must be strictly adhered to. I am, from observation and experience fully satisfied, that we frequently stand in our own light, by not attending to the *first laws* regulating the *dispositions* of the animal world. A little occurrence at our own door, led me to observe this circumstance most forcibly. I had a neighbor with a highly laudable zeal to find out the "*best way of doing every thing*," as he termed it, and being anxious to raise *hogs* in considerable numbers as an article of *pecuniary profit*, endeavored to ascertain that "*best way*." Being *blest* with a little more *zeal* than strong *natural* sense, he was readily carried away by a plausible theory, and having had a detail of the "*Mexican piggeries*," he soon had one fixed, and was prepared to rival the Spaniard in the art of fattening that animal. After considerable reasoning with him on the subject of "*Old Ned*," I had succeeded so far, as to obtain about *one hundred feet square* of ground, around the *nicely floored board apartments*, raised *two feet from the ground*, with substantial doors to four rooms, in which *five* of the grunting fraternity, could con-

veniently repose and feed. This little square of ground was beautifully shaded with oaks, and the earth kept consequently cool—and lying considerably elevated, was always dry, in good weather. Into this, I persuaded him, to throw a bed of leaves. It was not long before this became a subject of heavy complaint. After his hogs were "put up in the nice clean rooms, swept carefully every day," for some time, they were gnawing at the doors to get out—"preferring the cool earth and leafy-bed, to the 'nicely floored rooms.'"—Fifty times I have witnessed the contest between the hogs and their attendant, when attempting to get them back to their apartments, especially if the night or evening was warm or sultry. And it was discovered that they did not thrive as kindly, as some that "ran out." I prevailed on him to change the Mexican theory a little, by permitting the animal to consult his own taste and feelings, and to obey the laws of his nature, and throw open the doors of the nice rooms, permitting the animal to go in and out, at his pleasure—and also to increase the yard, so as to take in a small branch and a mud hole. This last he acceded to, as the honest Hibernian "obeyed the laws" with "great reluctance"—and to his mortification, the animals never attempted to go into their rooms, unless the day or night was extremely cold or wet—but this last was soon done away by discovering that they "throve mighty fast," and "looked sleek." Instead of the Mexican "clean, dry corn," and "clear water," and "flute," I induced him to add to the corn when boiling, a little lye, occasionally, a small portion of pulverized copperas, with a portion of *Ruta Baga*—boiled peas, sweet potatoes, rotten wood and charcoal, and washing all down with a fermented drink of meal and water. His astonishment was complete when he found that his animals had so "little taste," that when they could "get this liquid, they would not drink a drop of water."—But all was reconciled to it at last by the discovery, that he "never saw hogs fatten and look so well in his life." The fact was, that the whole process was somewhat of an imitation, of the course demanded by the laws of nature, as fixed in the animal.

From what we see of the cow kind, and, indeed, the whole animal world, it is certain, that the stomach craves a variety of food—that they receive animal enjoyment from its use, and that they also, we know, by experience, in fattening receive signal benefit from that variety if judiciously mingled. But we know a little more from every day's observation.

We see frequently that animals of the cow kind, are the subject of disease, and that nature has wisely, and kindly made them their own physicians—and we know that the plants they occasionally seek, and eat with avidity, are certainly highly medicinal. Put one of those animals in the best meadow, embracing all the finest grasses cultivated and it will leave the whole occasionally, nay break out of the enclosure, for the productions of the forest, and the thousands of weeds and shrubbery that abound there, are eaten with equal avidity, and gratification. In its reclaimed state, a great deal of motion does not appear necessary to the health of the cow or ox, or their young—although as much as would amount to exercise, we

are satisfied must be called for to keep up the proper action of the animal functions.

All artificial medical preparations for the purpose of exciting the appetite, or producing a fattening propensity, it is wise to avoid, I am assured. In this animal, if a high state of health is kept up, the propensity of the beast to fatten, with sound animal fat, is as great as the natural constitution of the animal will allow of, and those preparations may, and I know does, frequently produce an inverse effect, and not unfrequently generates disease. In the article of diet, this effect can be produced, viz. a disposition to take flesh, and accumulate fat, but this is in a way, conformable to the order of nature, no straining, substituting, or violating its laws—it is simply aiding—and this last, my experience tells me, is an important item to be observed in rearing, and fattening the cow kind, as also, all other animals, relied on for animal food. In the observance of this last item, the farmer may safely look for a real advantage in accumulating, as also by its observance in the general mode of feeding and supporting his animals.

COMMON SENSE.

Alabama, Aug 18th, 1835.

To the editor of the Farmer and Gardener.

Permit me to lay before your readers the following extract of a letter from Mr. Herbemont of South Carolina, the most successful wine maker in this country. The advice he gives on the application of calcareous earths to vineyards, is important; and comes with peculiar force and propriety from one of so much experience and so capable of profiting by experience. Let me add, that the wine made by Mr. Herbemont, is of very superior quality, particularly his white wine, which has been said by good judges to resemble the *Sauterne* very closely.

Yours,

G. B. S.

Extract of a Letter from N. Herbemont, Esq. to Gideon B. Smith, dated Columbia, S. C. Sept. 25th, 1835.

"I am much obliged to you for the trouble you have taken, and the consequent information you give me relative to the culture of the grape in your vicinity. The last winter was the most severe one ever experienced here within the memory of our oldest men. It could not have been less so in Maryland. Our foreign vines were almost all killed down to the ground; but my Madeira, or, as you call it, the *Herbemont* and *Lenoir* stood it bravely. I am glad to learn that some of your zealous gentlemen do not despair of success. Perseverance is the thing, and I do not know an object more worthy of it. I beg you will tell such of them as you may see, that the more I read and reflect on the subject, the more I am satisfied of the propriety of manuring the vineyards largely with calcareous earths, fossil shells or marl, or lime, provided the latter is no longer caustic, using at the same time such other manures as rich vegetable mould or cow pen manure. The expense of this should be disregarded, and for the sake of economy a small extent of ground, say half or one acre might be tried first. What if it should cost one hundred dollars to put one acre of vines in proper condition, this would be nothing, if success is the consequence; for \$100 as the principal would then yield from 500 to 1000

gallons of wine, which at \$1.50 would be an interest not to be complained of."

Let me add, as one of the reasons for the application of lime in any or all of its forms, to vineyards, that it is supposed by experienced men, that lime protects the soil, and, consequently, the plants growing in it, from the effects of severe cold in winter and droughts in summer; and this, too, in addition to its other not so well understood properties of fertilization.

G. B. S.

[For the Farmer and Gardener.]

RIPPLE—CLOVER SEED.

I take the liberty of forwarding you a very flourishing specimen of the *Plantago Lanceolata*, for the inspection of such of your dealers in Clover seed as may wish to see a plant whose name is more familiar to them than its appearance.—This plant is the very notorious Ripple, the seed of which is supposed to infest the clover seed which is bought and sold in such large quantities in the Baltimore market. The word Ripple is very common, at least, in my section of country, and in other parts of Pennsylvania, and with the dealers in clover seed every where, and yet you seldom see a farmer that knows the plant by sight, and scarcely a dealer in clover seed in the cities that can tell you any thing more about it than that it is some vile weed which infests the fields of clover, and the seed of which depresses the price of the clover seed.

The Ripple, it seems to me, Mr. Editor, has, like many an unassuming fellow, a much worse reputation than it is fairly deserving of, merely from not being known; and as I feel very much inclined to rescue it from at least a portion of the unmerited reproach to which it is subjected, especially in the cities, I hope you will indulge me with a little room in your paper for that purpose.

The *Plantago Lanceolata*, called in this country, generally, Ripple, is the Ribwort or Ribwort Plantain of the English, and the Plantain de Pries, of the French. It is called among the German farmers of Pennsylvania in some parts (*Spitz wegerich*) which word, Bailey, in his excellent German and English Dictionary, defines, the "Ribwort," or "Small Plantain." The Botanical description of it as given by Eaton in his *Manual of Botany*, (p. 332, ed. 1829) is as follows: "Leaves lanceolate, villose; spike short, cylindrical; bracts ovate, acuminate; scape angled, with close pressed hairs." He describes it as growing one and two feet high. The description as given by Dr. Darlington, of Chester county, Pennsylvania, in his "*Florula Cestrica*" (of which we should be glad to see a new edition) for which he cites Elliott's sketch of the Botany of S. Carolina and Georgia) is as follows: "leaves lanceolate, hairy; spike cylindrical, sub-ovate, naked scape angled, hairy—vulgo, English Plain-tain, Ripple grass, Ribwort, Buckhorn plantain. Fl. middle of May and after. Habs. Meadows, fields and grass plots, common scapes, 1 to 2 feet high."—This description as well as the former is accurate enough, as far as it goes, except describing the spike of this plant as naked, which it certainly is not. Loudon in his late very laborious and able work, "the Encyclopædia of Agriculture," says, "the ribwort plantain (*plantago lanceolata*) is a hardy native with a tuft of long ribbed leaves springing from the crown of the root, long naked

flower stems, and a long moniliform tap root."—He gives a very miserable cut of this plant, which affords but a faint resemblance to the original, the leaves being too broad and clumsy, and not tapering enough, the scapes (or flower stocks springing from the root) being only three (whereas in the specimen I send you there are nearly two hundred) and the spike or flower part being represented entirely too short and spreading. The engraving given by Dr. Anderson in his essay on agriculture is better, but exceptionable also.

It is difficult to give a description of a plant so as to convey a competent idea of it to the mind, even in the precise and discriminating language of the Botanists, and I shall not, therefore, attempt it. But, perhaps, those who are not conversant with the botanical terms used in the descriptions cited, may detect this plant when they know how it differs from one with which they are all familiar.—The ribwort resembles the common plaitain strongly, but differs from it in having a much narrower and tapered leaf, in the leaf being covered with a fine white hair almost imperceptible to the careless eye, which gives it a softer and downy feel, whereas the leaf of the common plaitain is very smooth and glistening. The ribwort shoots up a vast number (where it grows on moist ground) of slender flower stocks from the root, sometimes near two hundred but generally a dozen or so which are fluted and angled, and rise a foot and sometimes two high, and are terminated by a spike or flower part about an inch and a half or two inches long, covered with a soft downy wool lying close and about the color of bran; giving the appearance to the top of the stalk as if it had been melted and powdered over with that article.

It is to be attributed to their ignorance of its qualities that the clover seed dealers have given the "ripple grass" so bad a reputation. It is a grass that has been cultivated in England, Scotland, and the United States, as a pasture grass highly productive and nutritive, much relished by cattle and producing the richest milk and cream to the dairy.

Dr. Anderson in his "Disquisitions on Agriculture," (vol. 2, p. 253, ed. 1784) says, "the narrow leaved plaitain or rib grass is well liked by horses and cattle, and yields a very good crop upon rich ground tending to dampness, if it is at the same time soft and springy, but upon any soil that has a tendency to bind, or upon dry ground it furnishes but a very scanty crop. But as both this and white or Dutch clover have been long cultivated as pasture grasses, it is less necessary for me to recommend them to the public notice. They are both good pasture grasses."

Here we have the opinion of a very intelligent and successful farmer in favor of the value of this plant. Dr. Anderson wrote his work, it would seem, from the preface to the first volume, prior to the revolutionary war, and informs us at that time it had been a long time in cultivation; and London in his admirable work already alluded to, informs us that it is still cultivated. I will, however, take the liberty of quoting from him his remarks upon this plant shewing the different opinions respecting it. "It abounds," he says, "in dry soils as do several other species of plaitain, especially the P. Media. On dry soils it affords little herbage and is often left untouched by cat-

tle. Curtis Wethering, and other British Botanists, speaks unfavourably of the Ribwort as a pasture grass, but Haller attributes the richness of the milk in the Swiss dairies, to the flavor of this plant and the Alchemilla in the mountain pastures. In rich moist or watered lands its herbage is more abundant and its flavour altered—a circumstance not uncommon in the vegetable kingdom, but from which it does not always follow that the plant so altered is deserving of culture. In conformity with this observation, though the ribwort is a scanty and rejected herbage on poor soils, it is said by Zappa, of Milan, to grow spontaneously in every meadow of Lombardy, especially in those which are irrigated. It vegetates early, flowers at the beginning of May, ripens in five weeks and is cut with the poa trivialis; the height of the leaf is about one foot, and of the stock, a foot and a half, it multiplies itself much by the seed and a little by the roots, which it continues for some time to reproduce. Ribwort more especially in a cultivated state is eaten heartily by every sort of cattle, and in particular by cows who like it most in May, when it has great influence on the milk as the hay has on the flesh. In Scotland it is a useful addition to the proper grasses on lands to be pastured by sheep at the rate of two or three heads to the acre. When kept well fed down by stock, there can be no doubt of its being a very good and nourishing pasturage plant for both cattle and sheep, but it is by no means adapted for soiling. Young says he had long before recommended this plant for laying land to grass and sowed it on his own farm."

After giving some further remarks of Arthur Young, and the views of Dr. Anderson, already referred to, he continues. "It has been made use of in some parts of Yorkshire, as a summer grass. As an article of pasturage for cattle and sheep, it is there in high esteem: it is not, however, well eaten by horses. As an article of hay, it is held to be detrimental to the crop, retaining its sap an unusual length of time, and when dry falling into a small compass; or being broken into fragments and left behind in the field.

Dr. Darlington, in his Florula Cestrica, already cited, says, "this plant is also a naturalized foreigner. It is not much esteemed by the farmers of this vicinity; though in some neighborhoods it has been occasionally cultivated; and horses, horned cattle, and sheep, are all fond of it. It is becoming so common that it is difficult to procure the seed of red clover entirely clear of it, and it bids fair to prevail still more extensively."

I hope sir, after the perusal of these very respectable writers, a Scotchman, an Englishman and an American, in favour of this persecuted plant, that the farmers will feel less hostile to it, and that the dealers in clover seed will cease to use its depressed reputation as the means of producing a depression in the article of that important article. If it has been cultivated in Scotland and England, and the United States—if Arthur Young sowed it on his own ground and recommends it as nutritive and productive—if it yields rich cream to the milk pan, and gives a sweet flavour to the dairy of the Swiss, if horses, and cattle, and sheep eat it "heartily," why is it so derided by those who know so little about it. When I first heard of the Ripple in clover seed, I took

it in my simplicity, for some horrible production of nature, of endless duration, indestructible by ploughs and harrows, and scarifiers, infesting all your fields in defiance of every effort at extermination, more annoying than all the Canada thistles, and all the garlic and yellow snap dragon in creation, that fed and flourished on its own destruction, and that finally would rise and spread until it defied the power, and broke the heart of the disconsolate farmer. But when I sought for information about it, I discovered it to be a plant which flourishes luxuriantly in the rich meadows of Lombardy, and yields its sweet flavour to the dairies of Switzerland, which has been cultivated for its virtues in the old and new world and received the approbation of the most distinguished writers upon Agriculture.

The ribwort is a plant too, of very easy extermination, its root being short, bunched and fibrous, easily pulled up by the hands and eradicated by the plough. It withers and dies with the least exposure, and leaves no broken fragments of its radicles in the ground like the toad flax or snap dragon* to perpetuate its obstinacy and renew its annoyance. It does not, like the garlic, taint the products of the dairy with its noisome odours and disgusting taste, or like the vile St. John's wort,† disfigure with scabs and blotches, the feet and noses of your cattle. On the contrary, cows and horses, and sheep are fond of it, and eat it freely, and find it a pleasant and nourishing plant.

I can see, therefore, Mr. Editor, little cause for the excessive clamor against Ripple or Ribwort as a weed likely to infest the fields of the farmer,

It is true if a man wishes to buy clover seed, he wants nothing else, and especially a seed that he would not sow, perhaps, if he had it by itself; still when a farmer sends his clover seed to market, he does not wish to be told by the dealer in the city, who knows, perhaps, about as much about it as the horses that hauled it, that it has ripple in it, and on that account he will not give by 20 per cent. as much for it as he otherwise would.

The seed of the ribwort is a small black elongated seed and very easily mistaken for portions of the flower stalk of the clover, that in certain stages of the weather and conditions of the chaff, are apt to be nibbled by the mill in cleaning, into a form strongly resembling it. That the dealers in clover seed in the city, very often mistake either the little fragments of the clover stalk or some other seed for that of the ripple, and condemn the clover seed accordingly without sufficient examination, I am sufficiently satisfied. I know of the condemnation in Baltimore of the clover seed, on that account, of a friend of mine, when he told me there was not a single plant of the ripple on his plantation that he had ever discovered. As there are many other weeds likely to be introduced into the grounds of the farmer in sowing not only of clover and such grass seed, but of the grains, I intend to undertake this fall the trouble of collecting in little boxes and labelling the seeds of the plants most likely to give annoyance to the agriculturist and will transmit duplicates of them to your Lyceum. Yours, very respectfully,

JAMES DUNLOP,
Guilford Township, Franklin co., Pa.

* Antirrhinum linaria.

† Hypericum.

[For the Farmer and Gardener.]

MAMMOTH GRAPE.

Mr. Roberts—You are hereby presented with a scrip for publication in your esteemed periodical, headed as above, in consequence of Dr. Brownlow, my neighbour, and another gentleman finding in my vineyard a grape, that, for size and weight, challenges, we think, all the *grape creation* for an equal. At any rate it was concluded to send the account thereof to your periodical (as one perhaps, most widely circulated,) to see if its equal or superior could be found and attested. As I reflected that you might, perhaps, receive a simple account of a *monster* of this description with some distrust, I concluded to solicit the finder for a certificate, which is herewith subjoined:

"The undersigned measured and weighed a *Scuppernong grape*, found in the vineyard of Mr. Sidney Weller, with the following result: the rise of four inches round, and two hundred and fourteen grains in weight."

TIPPOO S. BROWNLOW.
JOHN W. BODDIE.

Brinkleyville, N. C. Sept. 15th, 1835.

Last year, about this time, seeing an account in the "*Raleigh Register*," of a *Scuppernong grape*, found in a vineyard near Raleigh, measuring three and a half inches in circumference, induced me to search for its match in my vineyard, and I succeeded, and weighing it, the result was, one hundred and twenty grains.

But I little thought then of ever finding one so large as that certified. It is not quite ripe. But I intend to preserve it in proof spirits. And if you desire I will send it on to your establishment.

And the thought now occurs to me that I might send it for one of the exhibitions of your "Horticultural Society," and if consistent with your rules to have any but a member compete for a prize, and the grape in question should be thought worthy of a premium, I should feel very proud to have the honour of a prize adjudged me. Yours, &c., in haste.

SIDNEY WELLER.

DOMESTIC SUMMARY.

A gentleman in Shrewsbury, New Jersey, will, it is said, realize by his peach crop this season, from \$10,000 to \$12,000. The United States' Engineers have ascertained it to be practicable to make a ship canal around the Falls of Niagara. The New Orleans Bee says that the mint to be built at New Orleans, according to the proposed plan, will cost 4 millions of dollars. A convention has been proposed to be held in Danville, Va. on the 5th of October to adopt measures for constructing a rail road from the town of Evansham, in Wythe county, a distance of one hundred miles. There were recently a mob threatened in Taunton, Massachusetts: the object was to demolish the jail and release the tavern keeper, who had been mulcted for selling without license, also to destroy the houses of the leading members of the Temperance Society. The timely array of *bayonets*, however, relieved the good people of their *mobish* fever and no attempt was made. We opine that these aforesaid *bayonets* are the very best *reasoners* upon such occasions. Our good friend of the Fredericktown Herald, has received a present of a bunch of Raspberries of the second growth, from Dr. John Tyler, of that place, in whose garden they were grown.

By the way, the editor of the *Herald* is in clover-luck, of late, he has scarcely issued a paper, but which *heralded* the receipt of some present of fruit calculated to make an epicurean's mouth water. We think from present appearances that in less than ten years, individual enterprise will have made a continuous line of rail road from the Atlantic to New Orleans.

We had the *Governor's Guards* from New Jersey, on a visit among us last week. Their appearance was that of soldiers, their deportment that of gentlemen. They were received and entertained by our volunteer corps with that cordial hospitality which is alike honorable to the donor and the recipient. Their presence recalled to mind many of those reminiscences of the revolution, when their sires of the Jersey Blues, and the troops of Delaware, and Maryland, fought shoulder to shoulder, in the glorious strife that secured our liberty. They left us on Saturday morning for their homes, and they will carry with them the best wishes of our citizens for their safe return, and future welfare and happiness.

FOREIGN ABSTRACT.

Advices from Europe, three days later than those in our last paper, have been received, being from Liverpool of the 27th August. In the House of Lords, on the 24th, a clause in the Irish Church bill was rejected—notwithstanding Lord Melbourne declared that if it should, he would not send the bill to the House of Commons. The vote stood 138 to 41—majority against ministers 97.

In France, the war against the liberty of the press, appears to be carried on unscrupulously by the Chambers, in despite of public opinion. The government of the Queen of Spain have determined on calling on France for an armed intervention.

CONTENTS OF THIS NUMBER.

Notices—of the Silk Manual—of the great Cattle Sale—of Mr. Dunlop's communication on Ribwort—of the essay of Common Sense—of Agricultural Fairs—of the fine Durham Short-horns of the Hon. C. A. Barnitz—of the address of Bellamy Storer, Esq.—A jaunt to Surrey Farm—Work for October—Agricultural Societies—Robert Sinclair's notice of Sir John Sinclair—Common Sense on soiling and fattening hogs—Extract from a letter from N. Herbermont to Gideon B. Smith on the use of calcareous manures in vineyards—James Dunlop, Esq. on Ribwort plaitain—Mr. Weller's mammoth Grape—Domestic Summary—Notice of the Governor's Guards of New Jersey—Foreign Abstract—Prices Currents, &c.—Advertisements.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.		
BACON, hams, new, Balt. cured,	pound.	11	11½
Shoulders, do.	"	10	
Middlings, do.	"	10	
Assorted, country,	"	9	9½
BUTTER, printed, in lbs. & half lbs.	"	18½	25
Roll,	"		
CIDER,	barrel.		
CALVES, three to six weeks old,	each.	3 00	6 00
COWS, new milch,	"	17 00	30 00
Dry,	"	8 00	12 00
CORN MEAL, for family use,	100lbs.	1 94	2 00
CHOP RYE,	"	1 62½	1 75
EGGS,	dozen.		
FISH, Shad, No. 1, Susquehanna,	barrel.	7 75	
No. 2,	"	6 75	
Herrings, salted, No. 1,	"	4 25	
Mackerel, No. 3,	"	4 50	
Cod, salted,	cwt.	2 25	2 75
LARD,	pound.	10	10

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM.	TO.
BEANS, white field,	bushel.	2 50	
CATTLE, on the hoof,	100lbs.	5 00	6 00
CORN, yellow,	bushel.		85
White,	"		85
COTTON, Virginia,	pound.	18½	
North Carolina,	"		
Upland,	"	18½	20
FEATHERS,	pound.	37	40
FLAXSEED,	bushel.	1 25	1 37½
FLOUR & MEAL—Best wh. wh't fam.	barrel.	7 25	7 75
Do. do. baker's,	"	6 75	7 25
Do. do. Superfine,	"	6 25	6 50
SuperHow. st. in good de'd	"	6 25	
" " wagon price,	"		6 00
City Mills, extra,	"		6 37
Do.	"		6 25
Susquehanna, firm & scarce	"		6 25
Rye,	"	4 62½	4 75
Kiln-dried Meal, in hhd.	hhd.	19 00	21 00
do. in bbls.	bbl.	4 37½	4 50
GRASS SEEDS, red Clover,	bushel.	5 00	5 50
Timothy (herds of the north)	"	2 75	3 25
Orchard,	"	2 25	3 00
Tall meadow Oat,	"	2 00	2 50
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.		15 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
Hogs, on the hoof,	100lb.	7 00	7 25
Slaughtered,	"		
HOPS—first sort,	pound.	12½	
second,	"	10	
refuse,	"	8	
LIME,	bushel.	33	35
MUSTARD SEED, Domestic,	"	5 00	6 00
OATS,	"	32	34
PEAS, red eye,	bushel.		
Black eye,	"		1 25
Lady,	"		
PLASTER PARIS, in the stone,	ton.		3 50
Ground,	barrel.	1 25	
PALMA CHRISTA BEAN,	bushel.	2 00	
RAGS,	pound.	3	4
RYE,	bushel.	70	73
Susquehannah,	"		
TOBACCO, crop, common,	100 lbs	4 50	5 00
" brown and red,	"	5 00	7 00
" fine red,	"	7 00	9 00
" wrappery, suitable	"		
for segars,	"	5 00	10 00
" yellow and red,	"	8 00	12 00
" yellow,	"	9 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality, ..	"	4 00	
" ground leaf,	"	5 00	8 00
Virginia,	"	5 00	10 00
Rappahannock,	"		
Kentucky,	"	8 00	14 00
WHEAT, white,	bushel.	1 30	1 35
Red,	"	1 20	1 28
WHISKEY, 1st pf. in bbls.	gallon.	37	37½
" in hhd.	"	35	dull
" wagon price,	"	33	33½
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 50	
To Wheeling,	"	1 75	
WOOL, Prime & Saxon Fleeces, ..	pound.	washed. unwashed.	
62 to 75		32 to 34	
Full Merino,	"	52	62 30 32
Three fourths Merino,	"	47	52 28 30
One half do.	"	42	47 26 28
Common & one fourth Meri.	"	38	42 25 26
Pulled,	"	38	42 26 28

VALUABLE STOCK FOR SALE.

A FULL-BRED Durham short horn yearling BULL, a very superior animal; a 7-8 blood, same age; also two COWS, 4 years old, 3-4 blood, in calf by a full-bred Bull. Pedigrees given in full. Applications for any of the above cattle to be made to the Editor of the Farmer and Gardener, by whom the terms will be made known. Letters from a distance must be post paid. June 30th.

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

VIRGINIA.	
U. S. Bank,.....par	
Branch at Baltimore,....do	Farmers Bank of Virginia, 3a
Other Branches,.....do	Bank of Virginia,.....do
MARYLAND.	
Banks in Baltimore,....par	Branch at Fredericksburg, do
Hagerstown,.....3a	Petersburg,.....do
Frederick,.....do	Norfolk,.....do
Westminster,.....do	Winchester,.....do
Farmers' Bank of Mary'd, do	Lynchburg,.....do
Do. payable at Easton,....do	Danville,.....do
Salisbury,.....5 per ct. dis.	Bank of the Valley,....do
Cumberland,.....3a	Branch at Romney,....do
Millington,.....do	Do. Charlestown,....do
DISTRICT.	
Washington, } Banks, 1.	Do. Leesburg,.....do
Georgetown, } Banks, 1.	Wheeling Banks,....1a2
Alexandria, } Banks, 1.	Ohio Banks, generally 3a3
PENNSYLVANIA.	
Philadelphia,.....3a	New Jersey Banks gen. 1a2
Chambersburg,.....3a	New York City,.....3a
Gettysburg,.....do	New York State,....2a3
Pittsburg,.....1a2	Massachusetts,....2a2
York,.....3a	Connecticut,....2a2
Other Pennsylvania Bks. 1a2	New Hampshire,....2a2
Delaware [under \$5]....3a4	Maine,.....2a2
Do. [over 5].....3a1	Rhode Island,....2a2
Michigan Banks,.....5a	North Carolina,....3a4
Canadian do.....5a	South Carolina,....2a3
	Georgia,.....4a5
	New Orleans,.....do

SHORT-HORN STOCK FOR SALE.

The subscriber intending to leave his country residence, offers for sale part of his Durham Short-horn Stock on reasonable terms.

Some are full blooded—others of half, three-fourths, seven-eighths blood, all derived from the stock of Mr. Powel.

There are some fine cows now in milk, some fine heifers and calves—One extraordinary cow, Flora, is offered for sale—She is by Mr. Powel's imported Malcolm. This cow when fresh, yields from sixteen to twenty pounds of the finest butter per week, and this butter is made as wanted for the table, by stirring the cream with a spoon in a bowl and usually in less than a minute of time.

I also offer for sale a young bull, very fine, from Flora, now 17 months old, and a heifer calf of about four months.

Also some fine sheep—full blooded South-downs.

C. A. BARNITZ.

Springdale, York, Pa. Sept. 29, 1835.

Oct. 6.

3t.

FULL BLOODED IMPROVED DURHAM SHORT HORNED CATTLE FOR SALE.

THE subscriber, will dispose of at private sale, part of his DURHAM CATTLE, which have been bred by himself from the best blood of Mr. John Hare Powel's stock imported from England and selected by Mr. Coates from the fold of J. Whitaker, to whom a standing order had been given by Mr. Powel to obtain the best animals, without limitation as to price.

1st. CALISTA, purchased from Mr. John H. Powel, got by Malcom, 6 years old this month, dam Maria, imported in 1827—Malcom imported in 1825 (bred by J. Whitaker) got by Enchanter, dam, Western Lady, &c.

2d. MARIA, 4 years old next January, got by Orlando, purchased at Mr. Powel's sale for \$300, when eleven months old, got by Malcom, dam, Zenobia, imported in 1828, and purchased by Dr. Thomas of Md. when seven years old for \$400.

3d. ZENOBIA, 2 years old last April, got by "Orlando," dam, Calista.

4th. ROMP, one year old April, got by Robt. Y. Stokes' bull "Pizarro," purchased of Mr. Barnitz of York, Pa., dam, Calista.

5th. GALLANT, 1 year old last May, got by Pizarro, dam, Maria.

6th. A FEMALE CALF, four months old, got by Pizarro, dam, Calista.

7th. A MALE CALF, 1 month old, got by Pizarro, dam, Maria.

The above described stock may be seen at my residence about four miles from Frederick, on the Liberty road.

sep 29 2t

WM. J. THOMSON.

GREAT STOCK FAIR AND SALE.

THE proprietors of the *Farmer & Gardener*, Baltimore, will hold a FAIR for the sale of Stock of all kinds on SATURDAY, the 24th, and MONDAY, the 26th day of October, inst at those commodious and eligible lots adjoining the Canton Race Course. They have been governed in their selection of this situation, by its convenient distance from the city, easy approach either by land or water, being distant from the heart of the city not more than two miles, and by the great convenience of transportation thither—there being a steamboat regularly running there from the city every hour in the day, from 10 o'clock, A. M. at the moderate charge of an elevenpence for each person.

The proprietors have already entered for sale at their Fair, the following valuable ANIMALS, viz.

BULLS.

No 1. The improved Durham short horned Bull *Leon*, bred by Wm. H. Freeman, Esq. of Baltimore, Md.—Calved on the 8th of August, 1830, now in possession of S. Canby, of Woodside, Del.

Leon—is by Gloucester, dam Flora.

Gloucester—was imported in July 1826, by Mr. J. H. Powell, calved Feb. 28, 1825 (bred by J. Whitaker, Esq.: one of the most celebrated breeders in England) by Frederick, dam Adela (bred by Mr. Whitaker: gave with her first calf 24 quarts per day) by Orpheus; g. d. Alfred (bred by Mr. Hestler, gave 24 qts. per day) by Alfred, (200 guineas was refused for Alfred) g. g. d. by Windsor g. g. d. Old Daisy) bred by Mr. C. Collins, (gave 32 qts. daily) by Favourite, sire of Comet: g. g. g. d. by Punch; g. g. g. d. by Hubback.

Frederick—roan, (bred by Mr. Charge) got by Hulton, dam, Orbit, by Comet sold for 1000 guineas; g. d. Splendor by Comet; g. g. d. Flecked Twin by Major; g. g. d. Red Simmon by Favourite; g. g. g. d. Flecked Simmon by Bartle; g. g. g. d. Old Simmon, (bred by Mr. Charge) descended from the Studley White Bull.

Hulton—(Bred by Mr. Charge,) got by Newton, dam Meteor by Comet.

Newton—(bred by Mr. Charge,) got by Comet, dam Fanny by Mr. Charge's Grey Bull.

Comet—red and white roan, calved in 1804, (bred by Mr. Collings,) got by Favourite, dam young Phoenix, by Favourite; g. d. Phoenix, by Foljambe, &c. &c. (Comet was sold for 1000 guineas at Mr. Collings' sale Oct. 11th, 1810).

"*Gloucester's*" pedigree can be found more at large in a work called "Hints for American husbandmen, published by the Pennsylvania Agricultural Society," in 1827, he is also recorded in the English Herd Book.

"*Flora*"—(dam of *Leon*) was got by Sampson, dam Betty, g. d. Old Betty; Sampson by son of Ossian, d. by Comet; Ossian by Favourite; by Bolingbroke; d. Phoenix by Foljambe; g. d. by Alcock's Bull; gr. g. d. by Smith's Bull; gr. gr. g. d. by Jolly's Bull.

"*Flora's*" pedigree can also be found at large in the 'Memoirs of the Pennsylvania Agricultural Society for 1824,' and is likewise recorded in the English Herd Book.

J. H. Powell, Esq. considers "*Gloucester*" one of the finest Bulls ever imported by him. He was purchased by Mr. Freeman for 1200 Dollars.

No 2. "*Hector*"—dark red, calved Nov. 22, 1833, by Parson, dam Red Rose, gr. d. Prize by Denton, Parson (owned by H. A. Carpenter, Esq.) got by Bishop, dam Moss Rose (imported in 1821, bred by Mr. Ashcrop) got by Phenomenon, &c.

No 3. *Major*—Red and white, calved March 8, 1824, by Duke, dam Fanny, (No. 4) by Parson; d. Isabella by Lothario.

No 4. *George*—Red and white, calved March 13, 1834, by Duke, d. Orphan by Lothario, gr. d. by Billy Austin.

No 5. *Uncas*—White, calved May 5, 1834, by Leon (No. 1.) dam Prudence by Parson; gr. d. Patience; g. g. d. Stella; g. g. g. d. Star by Denton; Star gave 40 quarts of milk per day.

No 6. *Peter*—White, calved May 5, 1834, by Leon; dam Isabella by Lothario; d. Meg by Billy Austin.

No 7. *Rufus*—Roane, calved August 28, 1834, by Leon; d. Flora (No. 6) by Parson; gr. d. Meg by Billy Austin.

No 8. *Henry*—Red and white, calved March 1, 1835, by Leon, d. Clementina (No. 1) by Lothario; g. d. Star by Denton.

No 9. *Ned*—White and red, calved 12, 1835, by Leon, dam Fanny, (No. 4) by Parson; g. d. Roan by Lothario.

No 10. *Bob*—Roan, calved June 9, 1835, by Leon, dam

Kate (No. 5) by Parson; g. d. Chance by Lothario.

COWS.

No 1. *Clementina*—dark red; by Lothario, d. Star, by Denton. Lothario was gotten in England by George; d. Moss Rose, (imported in 1821) by Phenomenon, &c.

No 2. *Cora*—red and white; by Parson, d. Clementina, (No. 1.)

No 3. *Hetty*—white and red; by Parson, d. Meg, by Billy Austin.

No 4. *Fanny*—dark red; by Parson, d. Roan, by Lothario.

No 5. *Kate*—brindle, by Parson, d. Chance, by Lothario.

No 6. *Flora*—red; by Parson, d. Meg, by Billy Austin.

No 7. *Laura*—red and white; by Parson, d. Gypsey, by Parson.

No 8. *Lucy*—red and white, calved April 22d, 1834; by Leon; d. Helen, by the Hon. J. J. Milligan's Red Bull.

No 9. *Caroline*—roan, calved July 18, 1835; by Leon; d. Flora, No. 6.

No 10. *Sally*—roan, calved July 28, 1835; by Leon, d. Laura, (No. 7.)

The pedigrees of all of the above animals will be given in full to purchasers, well authenticated.

In addition to the above they will have for sale at the fair from 16 to 20,

FULL BLOODED DEVONS,

Warranted pure and of the best blood in the country.

They respectfully solicit consignments from the owners of any of the following kinds of stock.

Improved Durham Short Horns—full blooded, and grades, whether imported or raised in this country.

DEVONS, do do do.

SUPERIOR OXEN,—well broken, whether improved imported or native kinds.

Superior MILCH COWS of native stock.

SHEEP—Improved Bakewell, Saxon, Merinoes—full blooded, and their respective grades.

Superior HORSES of all kinds.

MULES, JACKS and JFNNEYS.

Various breeds of HOGS, remarkable for size and taking on fat.

In every instance, where the stock to be sent, are of the imported full bloods, or of their respective grades, certificates of pedigree, well authenticated, must be sent, as it is the wish of the proprietors to make their FAIR a mart where the agriculturists of the country may resort with a certainty of getting genuine articles—just such animals as they may believe they are buying.

Should the proprietors of the Farmer & Gardener be met with that spirit of generous reciprocity, which they believe due to the present effort, it is their purpose to hold ANNUAL OR SEMI ANNUAL FAIRS, believing that they will not only conduce to the immediate interests of farmers and those engaged in raising stock, but to the country at large; for they hold it to be a tenable position, that whatever tends to advance one great national branch of industry, is necessarily promotive of the whole. The convenience to the agricultural community, of such an establishment as a great mart to which they may resort with the certainty of selling any fine animals they may have to dispose of, or of procuring such as they may desire to purchase, will be obvious at the first blush.

Animals coming by water can be landed at the Canton Company's wharf, adjoining the Fair ground. Owners of animals will send their own keepers. Hay, grass, and such other feed as may be desired, can be procured on the premises at fair market prices. Or if owners should prefer, a per diem for livery will be charged.

Seven and a half per cent commission upon all sales will be charged, and for each animal offered for sale that may not be sold, the usual offering fee.

A careful person will be on the premises to take charge of the animals as they may arrive and allot them their respective places.

JOHN I. GROSS, Auct.

oct 6

DEVON BULLS.

FOR SALE—Two full blood Devon Bulls. The first is a beautiful animal, 9 years old, of the purest blood and fine form, raised by one of the first breeders in the country; the other is a fine young animal, 1 year old, got by the above, out of a first rate Devon Cow. These animals will be sold on reasonable terms, their superior qualities being considered. Enquire of the Editor.

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THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 24.

BALTIMORE, MD. OCTOBER 13, 1835.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, OCT. 13, 1835.

SILK MANUAL.

The proprietors of the *Farmer and Gardener*, Baltimore, have in the press, and will speedily publish, a complete *Manual of the Mulberry and Silk culture*, compiled from the best and most authentic sources. As the object is the promotion of a great public interest, the cost will be moderate.

The *Cattle Fair and Sale*, by the proprietors of the *Farmer and Gardener*, Baltimore, will be held on *Saturday the 24th*, and *Monday the 26th* October, inst., at Canton near this city. Gentlemen desirous of procuring superior animals of the *Improved Durham Short-horn*, and *Devon* breeds, will do well to attend.

The third and last number of our excellent correspondent "*Common Sense*," on soiling Cattle, will command attention. It addresses itself to the reason of all, by its intimate knowledge of the demands and necessities of nature in the animal species.

Though we have been unable to persuade our valuable correspondent "*Silenus*" to unmask himself, and to add the moral force of his own thrice honored name to his excellent communications—and though he has assumed another and "more humble name," in his present remarks, we are not the less indebted to him for his response to our call for information, upon the subject of the GAMA GRASS. His experiments as detailed, are truly interesting, and we feel not a little flattered in finding our own opinion backed by that of one so competent to form one correctly, as is the author of "*Melibæus*." He has given to this grass a fair and enlightened series of experiments, and arrives at the following satisfactory conclusions:

1. That it will grow in any good soil that will produce wheat, corn or tobacco.

2. That the peculiarities and vicissitudes of our climates do not materially affect it.

3. That its growth is so rapid it may be cut every 15 days from the middle of May, until frost, and at that age it makes better and more delicate hay than when suffered to stand longer.

4. That it is the best hay he ever saw, resembling in odour the finest cured corn blades.

5. That it is more easily cured than any other hay, in consequence of its containing but little succulence and less woody fibre.

6. That it is preferred by stock to any other cured hay: and

7. That for the purpose of soiling and feeding green, there is no grass to be compared to it.

Certainly no intelligent farmer or planter will hesitate to follow the very laudable example of "*Melibæus*" after an array of such reasons as are given above for so doing. With regard to the objections to enter into its culture, upon the score of the difficulty of setting a meadow, they are handled with so much force and moral propriety by our correspondent, that we shall refer the reader, who may be among the corps of objectors, to his able exposition.

The example given by *Melibæus* of setting out between 4 and 5 acres in three years from a beginning of 20 plants, is a very strong illustration of the ideal character of the objection urged against the culture; but if a meadow of 4 or 5 acres in extent, which would yield 30 tons of hay to the acre, and upwards, annually, would not be sufficient, by purchasing 5 ounces of the seed, $13\frac{1}{2}$ acres could be set out after the second year. There are about 260 kernels in an ounce of gama grass seed—then, as 5 times 260 is 1300, and each seed will give 10 offsets the 1st year, and 20 the 2d, so will the 5 oz. in 2 years give 260,000, which would plant upwards of $13\frac{1}{2}$ acres from offsets alone, and if subdivided the 3d year, would occupy upwards of $268\frac{1}{2}$ acres; and this meadow when once set, will last, as that excellent gentleman and enlightened practical farmer, Dr. Magoffin, of Alabama, says, for seventy years.

Mr. Ruffin, of the *Farmers' Register*, a work of the very first order of merit, has commenced the publication of a weekly Journal, called "*The Countryman's Friend*." When we say that its columns are to be chiefly filled with the matter

from the *Register*, those who know the high reputation of that paper, will require no other guaranty that his new one will be worthy of all patronage. We wish him every possible success.

THE PASSION FLOWER.

A monthly periodical, with the above title, is published in the city of New York, and edited by Miss Anna C. Reid, a young lady of great merit, and, as is proved by her sweet and interesting work, of brilliant genius and classic taste.—Among her patrons she numbers many of the first men in the Union, some of whom, in addition to their subscriptions, have given her written testimonials of their approbation of her captivating labors.—Among her subscribers are the names of the late Chief Justice Marshall, the Vice President, Hon. Morgan Lewis, Bishop Onderdonk, and others equally distinguished.

The following, which we copy from the *New York Star*, will shew that its good name has found its way across the Atlantic, and extorted praise from the lips of Royalty.

"St. James's Palace, May 26th, 1835.

Sir Henry Wheatley presents his compliments to Miss Reid, and begs to acknowledge the receipt of her letter, dated April 30, and enclosing a little "Flower" for the Queen, which Sir Henry has not failed to submit to Her Majesty, who has directed him to assure Miss Reid, that the kind feelings and expressions contained in her note, are not less gratifying to her majesty than the little work which accompanies it."

The *Passion Flower* is printed on beautiful fine paper, in clear bold type, is fancifully bound in red morocco and gilt; contains 96 pages, forming 1152 pages in the year, and may be said only to be excelled in its mechanical execution, by the chaste and splendid talents of its highly gifted editress.

Subscriptions to the work, \$5 per annum, will be received at this office and promptly forwarded to the publisher.

The *Gentlemen's Vade Mecum*, of the 26th September, contains a likeness of *Fieschi*, alias *Girard*, the assassin, who lately attempted the life of Louis Phillippe, together with sketches of the infernal machine and the house from which the attempt was made. And their paper of the 3d instant, has an engraving, affording a graphic sketch of the position of the *Citizen King* and

the royal party, including his sons, at the moment the infernal machine was discharged by *Fieschi*. These engravings are well executed, and must have occasioned considerable expense to the enterprising proprietors. Such exertions to gratify public curiosity and cater for the taste of their readers is worthy of all praise.

SILK CULTURE.

We are gratified to be able to lay the following *postscript* to a letter from a gentleman in Fredericksburg, Va., to his correspondent in this place. It affords the most pleasing evidence that the "impetus has been given to the ball of the revolution," in the old dominion, at least, which will go onward until those worn-out fields, which bring so many sad recollections to the patriot's heart in the south, shall have again been made to blossom as the rose. We glory in it: the anticipations which it unfolds to our view, penetrate us with feelings which we would not exchange for "much fine gold."

"P. S. Fredericksburg and its neighbourhood are quite awake to the importance of the silk business. Not less than 80,000 trees will be set out this fall."

The growing importance of the silk culture may be appreciated from the fact, that there are already three able Journals published which are exclusively devoted to it, and find support, and which if fidelity and talents are appreciated properly, are well supported. The *Silk Culturist* is published at Hartford, Connecticut, by the Executive Committee of the Hartford County Silk Society. The *Silk Manual*, at Boston, edited by that distinguished agricultural writer, *T. G. Fessenden*, Esquire, and the *Silkworm*, at Albany, New York, edited by *S. Blydenburgh*, Esquire, also a gentleman celebrated for his agricultural writings. To say that each of those works are well conducted, is but faint praise; for they are all distinguished by their superior ability and unflinching industry, and deserve universal patronage.

The editor of the *Farmer and Gardener* would call the attention of the owners of land, on the tide waters of this state, to the advertisement of shell lime, which will be found on another page. He is prepared to contract for the sale of 100,000 bushels deliverable on any estate where there is a landing situated on navigable waters, not more than 70 miles from *Worton Point*, Kent county, Md., for 8 cents per bushel, as also for unburnt shells at $4\frac{1}{2}$ cents per bushel. All orders for quantities not less than 1000 bushels will be promptly filled. Letters upon the subject by mail, must be *post paid*.

LIME AS A MANURE.

The efficacy of this mineral as a manure, is beginning to excite very general attention. The success which has uniformly attended its application to almost all kinds of soils, extorts confessions of its utility from many who, until recently, had but little, if any faith in its meliorating powers. As there seems to be a universal desire to obtain information upon the subject of its *specific virtues*, we will endeavor to give something like an abstract view of them, and we know not how we can better effect our object, than by availing ourself of a condensation of the luminous paper upon the subject, submitted by Mr. *Browne*, of Derby, England, which may be found in the transactions of the society of arts. He asserts:

1st. That recent vegetables, as clover, laid on heaps and stratified with fresh lime, are quickly decomposed, even in a few days. The heat occasioned by the moisture of the vegetables uniting with the lime, he supposes, quickens the fermentation of the vegetable juices, and produces charcoal in consequence of combustion similar to that frequently produced in new hay stacks, which if any air be admitted burst into flame.

2d. Lime for many months continues to attract moisture from the air or earth, which it deprives, he supposes, of carbonic acid, and then suffers it to exale again, as is seen on the plastered walls of new houses. On this account it must be *advantageous when mixed with dry or sandy soils*, as it attracts moisture from the air above, or the earth beneath; and this moisture is then observed by the lymphatics of the roots of vegetables.

3dly. By mixing lime with clays it is believed to make them less cohesive; and thus to admit of their being easily penetrated by vegetable fibres.

4thly. A mixture of lime with clay destroys its superabundance of acid, if such exists, and by uniting with it converts it into gypsum.

5thly. When lime is mixed with a compost of soil and manure, which is in the state of generating nitrous acid, it arrests the acid as it forms, and produces a calcareous nitre, and thus prevents both its exhalation and its easy elutriation.

And lastly, fresh lime destroys worms, snails, and other insects, with which it happens to come in contact, and with which almost every soil abounds.

These are among the chemical effects of lime, and its practical operation, and beneficial results, in the increase of the quantities of the products of the earth, are equally as astonishing, as they are salutary. Lands which for years have yielded from 6 to 10 bushels of wheat, have, by the application of lime, the ploughing in of a single crop of clover, and a proper observance of the rotation system, been so far meliorated as to yield from 20 to 30 bushels of good heavy wheat to the acre. With such facts before the eyes of landholders, within the reach of lime, we would ask, is there any apology for their permitting their

soil to remain longer impoverished? We broadly affirm that there is none—and we go further, and say, that those who reside within an accessible distance in the *marl districts* of tide water, will be guilty of culpable negligence, if they longer omit to make a liberal application of it. Shell-lime can be delivered on any estate lying on a navigable river or creek, not more than 70 miles from the place of procurement, for 8 cents a bushel; and should any man begrudge such an outlay, when it is sure to bring him back two and three hundred per cent? We answer, certainly not.

The American cattle show and fair at Pawtuxet, Rhode Island, was held on Wednesday the 28th ultimo, and we are delighted to find among the premiums, the following:

The Committee on *Raw Silk and Mulberry Trees*, beg leave to report, having attended the duties assigned them—award to
Lemuel Burgne, of Wickford, for 4000 *Mulberry Trees*, 1st premium. \$5
 Do. do. for 4900 skeins of *Sewing Silk*, 1st premium. 5
 Do. do. do. for samples of *Raw Silk*, 1st. premium. 5

All of which is respectfully submitted.

For the Committee,
 S. KNIGHT.

This is really doing things in earnest—4,000 *Mulberry trees*, if planted as standard trees, will, at maturity, yield their enterprising owner an annual income rising \$25,000.

We make the subjoined extracts from the notice of this exhibition from the *Providence Journal*, and hope it may serve to stimulate agriculturists to action, in the formation of societies in every county in the Union, where there are none. And we are equally solicitous that the good luck of Mr. *Burgne*, in the *Mulberry* and silk culture, may serve to inspire a feeling of kindred emulation throughout the land.

CATTLE SHOW AND FAIR.—We have only time to give a very brief and general account of this agricultural festival, which took place at Pawtuxet on Wednesday. The ploughing match was the part of the exhibition most worthy of attention. Nine yoke of oxen were in the field, and they ploughed an eighth of an acre each. The yoke which came in soonest performed the work in *twenty minutes*, and none of the others varied more than five or six minutes from that time. They were all very fine oxen, though we thought three yoke were on the whole decidedly superior to the rest.

The amount of neat stock entered was very small, and with the exception of one bull, and two heifers, was of nothing more than an ordinary quality. The bull referred to is the property of the venerable *Moses Brown*, of this city, and though only *twenty-two months* old, is a splendid animal. It is said a much finer lot of animals would have been entered, had it not been for

the violent rain on Tuesday afternoon, the very time when they should have been entered.

Among the most interesting productions of the arts, was a Patent Straw Cutter invented by Mr. Benj. R. Greene, of Warwick. We have had considerable practical acquaintance with the variety of machines which have been used for cutting fodder, and consider this a very great improvement on them all. We intend to give a particular description of it another time. There were a variety of carpets and rugs of household manufacture, some of them of very heavy fabric and brilliant colors. One of the neatest articles which we saw, however, was some cocoanut shell ladles with curled maple handles set, some into silver and some into Britannia sockets, having also either a silver or Britannia rim around the edge. Another pretty thing was a tastefully wrought shell work box; and there was some fancy work bags ornamented with beads and melon seeds that attracted much attention.—There was also there, air beds and cushions made of India Rubber cloth, and India Rubber garments of various description, and some good specimens of flannel and other cloths of household manufacture. A quantity of fine wool prepared for making the Merino cloth, was to us quite a novelty. Among the other fine things we saw we would not forget to mention an Ottoman most beautifully embroidered.

The products of the Dairy were very fine.—There were numerous lots of butter and all of them of excellent quality. The variety of cheese was not so great, but the specimens presented were very good.

Many of these fine things were at length put under the hammer of MARTIN STODDARD, our accomplished Auctioneer, who made purchasers feel so rich and put them in such good humour with themselves, that we verily believe if his time and goods had held out he would have drained half the people present of their entire estates.

The day was fine and the crowd of spectators was much greater than has ever attended the exhibition before.

ECONOMY AND COMFORT.

As the season has arrived when every proprietor must procure shoes for his slaves, we think it not amiss to publish the following recipe for making an elastic paste with which to saturate them. The tendency of which is, first, to make them perfectly water-proof; secondly, to make them last as long again as they would without its use, and thirdly, to make the hardest leather soft and pliant, and, therefore, more easy and comfortable to the feet. We have said that it will make the leather "perfectly water-proof," and in so saying we speak from experience, having gunned in a pair of boots saturated with this mixture for years from early dawn, till near night, day in and day out, during each return of the woodcock season, the better part of which time, we were half knee deep in mud and water, and came out with our stockings as dry as when we entered the wil-

low bottom. The following proportions will answer for 50 pair of shoes.

Take 3 oz. Gum Elastic, cut it up into fine shreds, put it into a gallon jug, add to it 3 quarts of Seneca oil, let it stand three or four days when the gum will have been dissolved, and the paste fit for use. Stir before using, then rub the uppers and soles of the boots or shoes well with it, three or four different times, before the fire, whilever the leather will absorb it. The degree of comfort which this mixture will ensure to the wearer of heavy shoes or boots, can only be realized on trial. It might be used with an equally good effect upon the harness and gearing of work horses, and we have no doubt would make one pair last as long as two.

Having given this recipe, we feel it due to candor to say that the merit of its discovery belongs to Mr. Gideon B. Smith, of this city.

Exchanges—Editors of papers with whom we exchange, who do not receive our next and succeeding numbers, will please discontinue theirs.

ENGLISH HOGS.

The following description of English hogs, which we copy from the last American edition of the Edinburgh Encyclopedia, will be found to possess interest.

The *Berkshire* is a small boned breed and disposed to fatten quickly. It is the sort mostly fattened at the distilleries, and is good either for pork or bacon.

The *Chinese* breed, the size of which is small, and the flesh delicate, is to be met with in every country. It is the best adapted for using as pork, but is seldom cured into bacon, being too small for that purpose.

The *Gloucestershire* breed, which Mr. Marshall supposes to have been formerly the prevailing breed of the Island, is large, but ill formed. Its color in general is white. It is a very unprofitable sort, and is chiefly confined to the Gloucestershire, Shropshire and the west of Devonshire.

The *Hampshire* breed is very large, but not so compact as the Berkshire. They are white, well disposed to fatten, and come up to a great weight when properly managed.

The *Herefordshire* is a large useful breed, but not by any means superior to either the Berkshire or Hampshire.

The *Rudgwick* breed, so called from a town of that name in Essex, on the confines of Surrey, is supposed by Mr. Middleton to be the largest in the Island; feeding to an extraordinary size, and, at two years old, weighing nearly double or treble the weight of other sorts of hogs at that age.

The *Northampton* breed, which are reared chiefly in that county, are of a large size, but they do not fatten very kindly. The breed of Shropshire is nearly similar to that of Northamptonshire.

The *swing-tailed* breed, are not very numerous. Their size is small; their form well proportioned. They are hardy and fatten to a good weight.

The *Bedford* breed is a variety of swine introduced some years since by the late Duke of Bedford, called the larger-spotted-Woburn breed. They are very prolific, hardy and well disposed to fatten, attaining nearly twice the size and weight of other hogs.

DIRECTIONS

For planting the Gama Grass seed, cultivating the grass, and curing the hay.

In the first place you must put your seed into a vessel, add to an ounce of it, 2 gills of soot, pour thereon a quart of boiling water, let the seed soak 48 hours, then drain and roll it in plaster, when it will be fit for planting. Manure the ground well, with a compost consisting of equal parts of ashes, loam and stable manure, or vegetable mould from the woods, marsh mud and lime; plough it in well, harrow and pulverize finely, then make your drills one inch deep, 18 inches apart, and plant your seed the same distance asunder. They will come up in a few weeks, say two or three, and when up, they must be kept clean of weeds, and the earth stirred two or three times during the season. If you plant but a small portion of seed, and desire to enlarge your stock of grass through that means, don't cut your grass, let it go to seed, and when the seed are ripening, you must be careful to go into your patch every morning and pick them off the stalks, as they only ripen one or two at a time, and unless carefully watched will drop off and be lost.

Early in the spring of the 2d year, subdivide and transplant, and so each year until you have sufficient ground set out. Each plant will make ten or twelve offsets the first year, and twice that number the succeeding one.

If planted as soon as the frost is out of the ground, it will be fit to cut the first year by the 1st of June; succeeding years from two to four weeks sooner, and will bear cutting every 30 days for hay, and every 15 days for soiling. It has yielded 300,000 lbs. of green grass to the acre.

After each cutting, the earth should be stirred, and receive a slight top dressing of leached ashes.

The grass cut in the morning may be put into stack in the afternoon; in stacking, take, alternately, a layer of oats, wheat or rye straw, and then a layer of the Gama Grass, then sprinkle with salt, &c. until your stack is complete: by this means you not only effectually cure your Gama Grass, but convert your straw into a substance equally as acceptable to your stock as the best hay.

ROBERT SINCLAIR, Jr.

Seedsman, Baltimore.

P. S. An ounce of seed, which contains 260 kernels, will by being planted and subdivided three seasons in succession, enable the culturist to set out a meadow of upwards of 53½ acres, which will last him 70 years.

Large Onions—The Maryland Gazette of the 17th instant says—"We have now in our office four onions of the red kind, raised from seed sown in April last by Mr. Wm. Laing, of Buck's county, Pennsylvania, Bristol Township, weighing two pounds eight ounces, averaging in circumference twelve inches. Mr. L. raised 300 bushels from seed this season, on three-quarters of an acre of land." The sight, no doubt, is enough to draw tears from one's eyes.

[For the Farmer and Gardener.]

Saint Mary's county, Md. Sept. 15th, 1835.

Mr. E. P. Roberts,

SIR—I perceive in the 18th No. of the Farmer and Gardener, you express a desire that “some one of the many gentlemen who have sown Gama grass in this quarter, should communicate how it stands our climate.” I have tried upon a limited scale, but the result has been such as to enable me, I think, to respond to your desire with a high degree of confidence in the correctness of my conclusions. In the spring of 1834, I had the favour to receive from a friend, a very small package of seed, (but too late from some miscarriage in its transmission for successful propagation) and on the 19th April, I planted them in my garden, 18 inches apart to the number of about a dozen.—Four only came up, which, however, grew well during the summer without once watering, notwithstanding the unusual drought, and without manuring or any particular attention. Indeed, I had no very exalted ideas of its value upon high land, and I noticed it but little. I observed, however, that it was eaten down once or twice during the latter part of summer by horses accidentally getting loose in the garden, and once during fall—so that when the frosts of winter came, it was not more than 3 or 4 inches high. Thus it neither had any natural covering of its own, nor did I give it the least artificial protection. The situation was flat and entirely exposed to the northern blasts, and the severity of winter. The continuance and intensity of the cold of last winter have scarcely a parallel in this climate, within the period of the last century. On 31st March last, I took up the plants, with the view to transplanting, and I found that they had not only passed the severity of the winter unscathed and unhurt, but indicated an extraordinary degree of fruitfulness, health and vigor. Having subdivided the plants, I found that I had more than 40 offsets or branches with a root to each, and some 12 or 15 without—all of which I planted, and I have now 41 plants living, some of which would give from 20 to 25 plants or offsets each. The summer of 1834 being one of unusual drought, the seed having been sown too late in the spring to give the plants the advantage of the vigor of an early growth, and yet having expanded and increased in number, more than ten-fold, and the winter following being characterized by a severity not likely to be exceeded, and the plants naked and entirely exposed, and yet not in the least affected, there seems to be no question that the *Gama grass* will stand any contingency of season likely to occur in this climate, and so far the object as indicated by your desire seems to be met. But so conclusive are my convictions, not only of its capacity to resist the droughts of our summers and the severity of our winters, but also of its incomparable value as an article of provender, that I cannot forego this occasion to press it upon the attention of all who have an acre of land for agricultural purposes. On the 29th of March, of the present year, I transplanted the offsets as subdivided, to the number above stated, about 18 inches apart. I selected for this purpose a hard piece of ground, and of very moderate fertility, but well prepared, with the view of more fully testing its adaptation to a dry and arid soil—for although

the previous results had been highly satisfactory, yet I was disposed to subject it to still further trials and hardships, that I might not be exposed to disappointment in the event of my introducing it into the plantation crops. I accordingly paid no more attention to it until June, when I hoed it and cleaned it of grass and weeds. It was evident that it suffered materially from this neglect, and to it I attribute the loss of most of the plants which were inserted without a root. In a short time I cut it, then about 15 inches high, with the expectation of its causing it to branch the more. I do not know that it had the effect. In a few days I perceived its growth to be so rapid that it arrested my attention, and I slightly manured it with tobacco stalks. I again cut it on the 24th July, with the same view, it being about 16 to 17 inches high. It was now apparent to me that it possessed a recuperative power after cutting, and rapidity of growth far exceeding any other plant in the whole vegetable kingdom which ever came under my notice. On the 8th of August, I again cut it, 15 days intervening only since the last antecedent cutting, and I found its growth greater both in height and bulk than before—and during the whole of which time it had not the advantage of a single shower of rain. Being now fully satisfied of its incalculable importance, especially to the tobacco growing counties of Maryland, I determined to cut it no more, and permit it to run to seed with the view of increasing my stock as well by the seed as by the offsets. But few of the plants have as yet produced seed, and I find great difficulty in securing those which have been matured. They ripen singly, and either drop and are lost in the earth, or are taken by birds. My limited experience justifies the following conclusions:—That it will grow in any good soil that will produce wheat, corn or tobacco—that the peculiarities and vicissitudes of our climate do not materially affect it—that its growth is so rapid it may be cut every 15 days from the middle of May until frost, and at that age it makes better and more delicate hay than when suffered to stand longer, and is the best hay I ever saw, resembling in odour the finest cured corn blades—that it is more easily cured than any other hay, in consequence of its containing but little succulence and less woody fibre—that it is preferred by stock to any other cured hay—and that, for the purpose of soiling and feeding green, which with us is so desirable during the summer months, after the first crop of clover fails, which is generally about the 10th of June, there is no grass to be compared to it. With regard to the quantity to be produced to the acre, I can of course form no conclusive estimate from my own experience.—But enough has been developed to convince me that more *Gama grass* hay may be produced on an acre of highly improved land than can be obtained from six times the quantity equally improved, in any other description of hay that I have ever observed.

Agricola, a very intelligent writer of Alabama, and who has perhaps, more experience in this grass than any other individual in the United States, says, “I am assured in this climate, (Alabama) that planted 18 inches from plant to plant, and cut at every 15 days growth, beginning the first day of May, when it is found from 3 to 3½ feet high, and ending the last of October, it will

be found yielding 300,000 lbs. of green hay per acre.” He farther states, that he has cured it at a loss of less than one half. But say that one third of that quantity can be produced, and that it may be cured with no more loss, you then have 100,000 lbs. of green hay, or 50,000 of dry, equal to 25 tons per acre. This seems to be an extraordinary product; and so it is. But when it is recollected, as my own experience justifies, that it may be cut every 15 days from the 15th of May, to the last of October, from 14 to 18 inches high, and much thicker than clover, scepticism gives way. But it is said, that so long a time is required to establish a meadow, and so much attention requisite, that but few have sufficient patience to sustain a hope so long deferred, and that the advantage, however great, is too remote. To this objection, truly suicidal in itself, and which, unfortunately, is too common in matters appertaining to agricultural improvement, I reply that the instances are rare indeed, in which our condition in life is materially improved without patience, perseverance and toil. If such a principle had influence, generally the determinations of man—if education had been stayed because of the slow and almost imperceptible steps with which it advances to successful accomplishment, what would now have been the state of the world; its moral and social condition?—where those vast and extraordinary developments, in the arts and sciences as applicable to the uses and purposes of men?—all, all enshrouded in the dark and hopeless clouds of chaos. But let us see what is the delay attendant upon the establishment of an acre of *Gama*. We will suppose that seed may be obtained by as many as are disposed to make the experiment to raise 20 plants—at the close of the first year, you will have, as has been shown by experience, ten for one, equal to 200, at the close of the 2d year 20 for 1, equal to 4000, and at the close of the 3d year, in the same ratio, 80,000, enough to establish, at 18 inches apart, which seems now to be the distance preferred by *Agricola*, between 4 and 5 acres of meadow—more than would be necessary for any plantation in the state. In the 1st year of final planting out, which would be the 4th from the beginning, you would realize, as has been shown by the experience of Wm. B. Meares, Esq., of N. Carolina, 63,000 lbs. of green hay per acre. See 15 vol. A. Farmer.—The 5th and 6th years will complete the meadow, and leave it without further care, except occasional manuring, and it is found to benefit by manure to the same extent of other grasses, at which time it will be found producing at least the quantity as suggested by me above. Mr. Magoffin, of Alabama, informs us that he has actually made at the rate of 90 tons of green hay per acre in one year—and he believes, that 300,000 lbs. may be produced. See A. Farmer, 13 vol. The result of the experiment of Dr. Hardeman, of Missouri, is still more flattering. See A. Farmer, 10 vol. But it is unnecessary to quote farther. Of the immense value of this grass upon dry land, there cannot be a question. So much for the delay—and if 100 seed could be obtained the first year, one year would be saved in the establishment of an acre. Let us now see the labor. The first year the care of 20 plants would not be worth naming—the 2d year the labour of attending to 200 plants may be estimated by the fact, that the

whole would not occupy the space of 25 feet square. The next year's work would be something—but all who have planted an acre of tobacco know that it would not take the hands on the smallest plantation two hours to plant 4000, and as regards the subsequent culture for the year, and the preparation of the ground, as the plants would occupy less than the fourth of an acre, they can also form an accurate idea. The work of the 4th year, the year on which the plants would be set out for final standing, would be the only labour of consequence. It would take about 18,000* plants per acre, and would probably occupy a day, and in the same ratio if the 5 acres should be planted, which would be unnecessary, unless near a city where the surplus would command a market. It would then require occasional stirring and hoeing, to keep down weeds and grass, for the next two years only. Thus it will be seen that the delay is not much greater than in establishing a timothy meadow, when you reflect upon the time occupied in clearing, ditching and preparation, and generally two years after sowing before you realize a crop. But what is the delay compared with the value of the improvement? An acre of land near a city, producing 25 tons at \$15 per ton, would give \$375—deduct \$75 for cutting, interest in the previous value of the land, &c. and you have the interest annually on a capital of \$5000. Will it be said then, that when your acre of land, worth but \$100, is made in five or six years to give you the product of a capital of \$5000, you are not required for all your delay and labour? But my remarks are principally intended for the lower counties of Maryland, where grass is scarce. An acre set in *gama*, would not be worth any thing like that sum, but when its various advantages are considered in reference to the saving of corn, improvement of stock, &c., is there a planter who will not say that it would be worth \$500 at the least? is there any other mode by which an acre of land in the same period of time, can be improved in value to the same extent? Let me then urge upon every planter and farmer, the necessity of immediate action if they can get but a single plant to begin with.† Let them not flatter themselves, that the day is not distant when they will be enabled to procure seed sufficient to establish a meadow at once. The difficulty in saving seed is so great as to preclude the idea. If they then desire a meadow it must be raised in the manner I have indicated, or not at all. I hope I have shown that the delay and labor are not to be measured by the benefit conferred; and most sincerely do I trust that the day is not distant, when it will not only be found gracing some proud spot in every lordly manor, but also, that its gracefully hanging blades will be seen decorating some modest square in the plat of the more humble cottager.

I will take occasion before closing this communication, to make a remark upon a regret which you expressed, that I had withheld from the public, my proper name in my remarks over the signature of Silenus—when I had the pleasure to see

you last spring, in interchanging some views upon a topic highly interesting to the philanthropist and political economist, and upon which you have since given a most able and interesting paper, replete with wisdom and humanity, you will recollect that you intimated a desire to have an article from me on the same subject. I, however, expressed my repugnance at appearing at all in a public print, upon topics which I felt the sincerest conviction, of my necessity for information rather than a capacity to impart it; and little did I think that in so short a time, I should be found in a position so new and unexpected. But whilst I was not physically bound hand and foot, my fate was not altogether unlike that of him whose name I bore, for I was encircled by a moral chord still more potent. You wrote me a note—civil and courteous—civility and courtesy claimed a notice—I gave it—but while yielding to this moral compulsion, I could not still forego my repugnance, and I took Silenus' garb and wore it. This repugnance I must yet indulge, and you will hereafter recognize me, as now, under the more humble name of

MELIBÆUS.

[For the Farmer and Gardener.]

No. III.

MANAGEMENT OF CATTLE.

Mr. Roberts—My last paper gave some of my general rules, on the effect of procuring the *highest degree of health* possible, in animals, especially of the cow kind, as a means, and what I am compelled to view, as the *safest*, of producing and keeping up a *fattening disposition*, as also of producing the *happiest growth*, as regards size and form.

I once had a neighbour, whose stable and cow yard, would have produced no bad shewing, for the shop of a country apothecary. His *horns for drenching*, and *pipes for clystering*, made a most formidable appearance—his kegs of *antimony*, salt-petre, Sulphur and *salts*, with a hundred more preparations of the shop, would have alarmed "Doctor Hornbook" himself, but notwithstanding his *pestle and mortar* was eternally going, he was continually losing by sickness and death, a fine, and sometimes fat cow, horse, or ox. *Well saved food*, *good salt*, and *pure water*, are the most important *medical* preparations, for the animal world, while the salutary qualities of the first, and its capacity to yield nutriment, may be increased by *chaffening* and *steaming*. The first process leaves it less a labour to the animal to fill themselves, and the last less laborious on the *stomach*, and *animal functions*. *Partial fermentation*, prepares many substances for the last result, and certainly is productive of high animal health. But here nature is again simply assisted—while the effect produced, is not *obesity* as a disease, but a *healthy accumulation of sound animal flesh*. *Judiciously mixing food*, undoubtedly gives a great advantage in producing a *fattening propensity*.—The *dry* retains in the stomach, the more *sappy* or *succulent*, until all is extracted that can be obtained, and the organs of digestion are not excited to that action, that is termed looseness, or purging. A sufficiency of salt, is one of nature's great aids of digestion, and stimulants to consume food. It ought to be given of the *purest kind*—and nature left to determine the quantity. Hard driving of animals is equally unnecessary and in-

judicious, especially the *milch cow*, as they are evidently highly susceptible of the effects of overheating. Exposure to severe weather, either cold or wet, their own *appearance* and actions, at such times, tell plainly, is to them destructive, and the *prodigious* difference in the quantity of food required, that *experience* has proved to be necessary to preserve, in even living order, leaves nothing necessary to say on that part of the subject.

But it may be necessary to remark, that nature never intended them for a *stove room*. *Pure air*, and a *circulating atmosphere*, are to them essential, and although they can do better in the absence of both, than the rational animal, yet we have evidently found the ravages of the "*Malaria*," even in the animal world. In hot weather, the cow kind in southern climates, especially, seek the top of an elevated dry ridge for a place of repose, and for the *night*.

In the management of *cattle*, especially in "*soiling*," a separation of the different grades, seem to be necessary and judicious. The *strong* will injure the *weak*, and deprive them of their just quantity of food. A *regular* and sufficient supply is *absolutely* necessary in this process, not only as regards the *health* of the animal, but *economy* in keeping—and consequently advantageous to the profits of the farmer or grazier.

One fact may be observed in "*soiling*" cattle, that I think worthy of strict observation. Cattle turned on pastures, will roam over hundreds of acres, selecting the *youngest*, *tenderest*, and consequently *least nutritive* growth of grass, to fill themselves. If the grass is *carried* to them, they eat with equal apparent pleasure and avidity, but much greater profit to themselves and the farmer, that which has arrived at *maturity*, consequently affording more *nutrition*, and rather more salutary. Governed by those ideas, which I view as fair results, I have endeavoured to fall on, and pursue, a system of "*soiling*" cattle in the latitude of 32° and I am assured, that I have not only succeeded, but that my cattle surpass, in every required quality, those of my neighbours which *roam* at large. I lose none from *disease*—none *stray* away—none *disappear*. I lose no time in *roaming* after them—they outgrow my neighbours, certainly, and fatten *kindly*—while in the all important item of "*Arator's*" gold dust, I am, almost, an incredible gainer—over those who pursue the "*old beaten track*." I have endeavoured to fall upon a system that *every man* who cultivates land may pursue, that is, if he views as I do, the *accumulation of manure*, one of the *greatest*, if not the most interesting objects of the *planter*, and I have endeavoured to make the *two systems*, go "*hand in hand*"—not only in their *value produced*, but in being effected with the least possible *labor*, or *appropriation of time*. At a leisure moment, I will give it to the columns of the Farmer and Gardener, and if it but *suggest any thing*, that may tend to bring both systems to a *greater perfection*, I will be most amply repaid for the time and attention paid to the subject, "*pro bono publico*."

COMMON SENSE.

Rearing calves.—The following is the general method of rearing calves in Britain, and differ not materially from that followed by Bakewell, the great cattle breeder.

"The calves sucked for a week or fortnight,

[Note by the editor of the Farmer & Gardener.

*The exact number is, 19,360.

†The seed may be obtained of R. Sinclair, Jr., Seedsman, Light street, Baltimore.

according to their strength: new milk in a pail, was then given a few meals; next new milk and skim milk mixed, a few meals more; then skim milk alone, or porridge made with milk, water, ground oats, &c., and sometimes oil-cake, until cheese making commenced, if it was a dairy farm; after which, whey porridge, or sweet whey, in the field, being careful to house them in the night, until the warm weather was confirmed. Bull calves, and high-bread heifers, however, were suffered to remain at the tile until they were six, nine, or perhaps twelve months old, letting them run with their dams, or more frequently less valuable cows or heifers."

[From the Hagerstown Torch Light.]

CLOVER MANURE FOR WHEAT.

The wheat crop is the most important of all crops to the farmer. A man who has one hundred acres of cleared land of common quality ought to raise on an average, *one thousand bushels of merchantable wheat*, and rye, corn, oats and potatoes sufficient to defray the expenses of carrying on the farming. The wheat crop should always be *clear gain*.

Don't startle at this farmer. A man who has a farm of one hundred acres of cleared land can yearly put forty acres of it in wheat; and if the land be in order as it should be, and as every farmer may have it, every acre of the forty will give twenty-five bushels, amounting altogether to one thousand bushels. I shall now show how land must be farmed, in order to produce in this way. Never break your land before harvest and stir it after as is customary with many farmers. Much ploughing impoverish land, and is productive of no good effects. Your wheat ground must be heavily set in clover, and broke up after harvest with three horses, when the seed in the clover is ripe. By thus turning clover down after harvest, when the seed is ripe, it will never miss coming up in the spring, which is frequently the case when sown in the spring with seed. You also save between forty and fifty dollars worth of seed annually, which it would take to sow your ground. When the clover is ploughed down after harvest, before you seed the field, harrow it lightly the way you have ploughed it, in order to level the ground, and prevent seed from rolling between the furrows, and coming up in rows. Never plough your seed in with shovels, nor harrow it across the ploughing when you have turned down clover after harvest, lest you raise the clover, but always harrow it in by twice harrowing with light harrows the way you have broken up your ground. Many farmers have ploughed down clover once, and finding that the crop was not bettered by it, but injured as they believed, have never attempted it again. This is almost invariably the case the first time clover is ploughed down after harvest, especially if the fall be dry and the winter frigid and close. In turning clover down you must necessarily plough the ground deep, and the first time you turn up the clay, which being unmixed with manure of any sort on the top, is in a bad state to sow wheat on. The wheat after some time will sprout and come up, but will look yellow and very spindling. Its roots after some time will get down among the unrotted clover, and there will choke, and for

want of moisture a great deal of wheat will dwindle away and die. The unrotted clover below will keep the ground wet and springy, so that the frost will injure the wheat not a little.* But when the clover is twice ploughed down, the bad effects to the wheat crop arising from unrotted clover are not experienced. You then turn up the clover from below, which was ploughed down before and which is a manure on the top.—The seed sown on it now springs up directly, and before winter sets in has taken deep root. The clover now turned down rots very soon in consequence of the rotten clover turned up, which as manure always keeps the ground moist, however dry the fall. You may now go on farming in this way: every time you turn up a coat of clover turn down one, and your wheat crop will never fail until your land becomes so rich that you will have to reduce it with corn.

I was pleased with the above suggestions, and I think it worthy the consideration of the farmer. We all know the fertilizing properties of clover, and that when mixed with the soil it is extremely congenial to the growth of wheat and corn. A good coat of it, well ploughed in, is better calculated to give an ample yield than a covering of stable yard manure. Its large, rank and thick growth is likewise extremely beneficial to a succeeding crop in another point of view. It occupies the whole surface of the ground, and prevents the grasses and weeds from growing, so that clover well turned in, leaves the ground clear and unoccupied by the roots of other plants which interfere with the growth of wheat. In this respect wheat is a remarkable plant, it will not thrive intermixed with any thing else; it must occupy the ground alone. But whether ripe clover ploughed in would seed the ground so as to give a succeeding crop of it, I will not undertake to give an opinion.—*Columbus Sentinel*. A.

[* Note by the editor of the Farmer & Gardener.

This objection and difficulty, if they exist, which we doubt, may be obviated by ploughing less deeply, or by top dressing the clover lay with lime, which will promote so rapid a decomposition of the vegetable matter turned in, as to convert it at once into an active fertilizing agent.]

CROPS.—We rejoice to learn by the Charleston Mercury, that the late gale has not inflicted as much damage upon our planters as was apprehended. The weather since has been an Indian summer calm, of a delicious temperature, sunny by day, bracingly cool at night, and as favorable as possible for the maturing and harvesting of the crop.

A letter from Beaufort of the 26th ult., received at Charleston, states that the crops are generally good—and the prospects of the Sea Island Cotton planters much better than they were at this time last year.

In *Missouri*, the editor of the Bowling Green Journal, says that he has never seen as fine crops of corn as there are this year throughout the

whole country. Every where, both in high and low lands, in the prairie and the wood lands, the grain is fine, and quantity abundant. Owing to this cause, pork will doubtless be better, and of greater quantity, than it has been in former seasons. He states further that the *Tobacco* crop has been gathered. The yield has been very large this year, and he believes has been generally housed, without any injury from the frost.

TOBACCO CROPS.—We have no recollection of such a long series of weather at this period of the year, in which Planters have been kept in so constant a state of anxiety for the fate of their crops. The unusual coolness of the summer has retarded the growth and maturing of tobacco to such an extent, that but a very small portion was ready to house, before strong indications of frost threatened the whole with destruction. For two or three weeks they have been kept in this posture; temperature verging so near a *black frost* that each night was apprehended as fatal, and the day so cool that very little of the crop was fit for the knife. Several light *white frosts* have occurred, and on Monday morning ice was formed in our gutters, but a light wind fortunately prevailed and the injury proved not to be extensive. More than half the crop is yet in the field—and we regret to add, that even if the weather should allow this to be saved, the crop of tobacco in Maryland will be short—owing in great measure to the coolness of the latter portion of summer, during which its growth is usually very rapid.

The *Crop of Corn*, in this neighbourhood never was better.—*Annapolis, Md. Republican*.

The *corn* crops in the neighborhood of Baltimore are remarkably fine.

The *Corn Crop*—Most of our farmers have gathered their fodder from their corn, and the eye can now discern the extent of the corn yield. It is very plain, that the crop is no way better than it was last year, if as good—on light sandy lands the corn is infinitely better than on the stiff clay lands, showing that the deficiency has been occasioned by the unusual coldness of the season.—*Centreville Times*.

The Lynchburg Virginian of the 18th inst., says, we have already announced that the recent severe frosts have been very destructive to the growing crops of Tobacco in this section of the country, though we are not able to estimate, with any thing like precision, the extent of the damage. A large quantity, that escaped the frost, was cut green, and from that circumstance, as well as the inauspiciousness of the season for curing, the quality of the next crop must necessarily be very inferior.

The last Danville Reporter says, that the frost in that vicinity was very severe. "Nearly all the tobacco that had been cut was destroyed—estimated at one-third of the entire crop."

The Fincastle Democrat informs us, that, in that section, a large quantity of tobacco has been lost. The corn crop has also suffered. It says—"The loss is believed to be more general and

greater than has been produced by frosts in this region of country for many years."

FOREIGN ABSTRACT.

London dates to the 20th August inclusive, have been received.

France.—The bill imposing restrictions upon the press in France, has passed the Chamber of Deputies; thus ends the *farce* of the great revolution of "three days."

Great Britain.—The corporations reform bill, has passed the House of Lords so "despoiled of its fair proportions" by the amendments of the Tories, that its best and most intimate friends scarcely knew it when it was returned to the house of Commons.

From *Spain*, there is nothing satisfactory: the queen's government was evidently too weak for the exigencies of the times, and without foreign aid cannot put down the insurrection.

Later from France.—Advices from *Havre* to the 2d Sept. have been received; but the news from France, in reality do not amount to any thing.

Spain.—Matters look more disastrous for the cause of the queen, and it is said that in the struggle of contending factions the government of the queen is shaken. Gen. Llander, the great constitutional chief is suspected of Carlism. The liberals insist upon the suppression of all convents, a reduction of the number of bishops and church dignitaries, the abolition of tithes, and the application of convent lands to the wants of the government.

England.—The new bill proposed by lord Melbourne for the preservation of the peace in Ireland, was rejected in the house of Lords by a vote of 51 to 39. The Duke of Cumberland had been summoned before the House of Lords to explain his connection with the Orange lodges.

Still later from Spain.—Captain Hartshorn, of the ship *Empress*, which arrived at New York on Saturday morning from Malaga and Gibraltar, in 28 days from the latter place, states that a revolution broke out in the provinces of Andalusia, Seville, Malaga and Grenada, on 23d and 24th of August, and that the Constitution of 1812 was proclaimed. All the Friars at Malaga were imprisoned on the 23d, and a number of them killed or wounded. The troops were put down, and all that were not in favor of the new Constitution, were either shot or imprisoned. There was great joy and illuminations throughout the place when Captain H. left, and things were getting quiet.

MARYLAND HORTICULTURAL SOCIETY.

SATURDAY, Oct. 3, 1835.

At a regular meeting of the Maryland Horticultural Society this day, John Schmidt and Thomas Smith, Esqrs. were elected as members of the Society. The following articles were exhibited viz:

By Mr. Peter Nante, 5 long orange carrots, and two bunches yellow Spanish Radishes.

By Mr. Francis D. McHenry, one peck seedling Onions, measuring 11 5-8 inches circumference.

By Mr. Hugh Dowling, 5 cucumbers and a very fine Pumpkin.

By Robt. H. Goldsborough, of the Eastern Shore, eight fine brown Buisse Pears.

By Dr. Saml McCulloh, a fine specimen of Seckel Pears.

By Mr. Henry Didier, the following Dahlias, viz: Agripina, Groombridges Alba, Queen of the Whites, Golconda, and Granta.

By Gideon B. Smith, a fine collection of seedling Dahlias.

By Mr. Francis D. McHenry, six varieties of Dahlias.

By Robert Sinclair, Jr. 4 varieties of Dahlias.

By John Feast, 21 varieties of fine Dahlias.

By Saml. Feast, 106 varieties of Dahlias.

At 12 o'clock, the Committee awarded the weekly premium to Mr. Peter Nante, for his fine Orange Carrots.

GIDEON B. SMITH, Cor. Sec'y.

CONTENTS OF THIS NUMBER.

Notices—of the *Silk Manual*—of the Cattle Fair and Sale—of "*Common Sense*" on soiling—of Melibæus and Gama Grass—of the Countryman's Friend—of the *Passion Flower*—of the Gentleman's Vade Mecum—of the prospect of the Silk Culture and certain works devoted thereto—of *time for sale*—Remarks on the fertilizing properties of *Lime*—of the Pawtuxet Cattle Show—Economy and comfort, or a water-proof paste—Notice to editors with whom we exchange—description of nine breeds of hogs—directions for planting the gama grass seed—large onions—*Melibæus*'s interesting experiments on the culture of the gama grass—"*Common Sense*" on the management of cattle—Mode of rearing Calves—Clover as a manure for wheat, with a note by the editor—Crops—accounts of—Foreign Abstract—Proceedings of the Horticultural Society—Prices Current—Advertisements.

CHOICE DOUBLE LARK SPUR SEED.



The subscriber offers for sale, put up in packets of 12½ cts. each, the most beautiful *Delphinium Ajacis fl. Pleno*, ever flowered in this country. The seed was grown the present season, and this splendid flower is thus described by the experienced horticulturist of whom the seed was procured: "The trusses of flowers are above a foot in length, on a stately stem of near three feet, are as double as roses; in fact they more resemble Hyacinths, and combine every shade of color from the darkest purple to the most delicate lilac, and from the most beautiful pink to snowy white, with emerald green centres; but in order to have them of this rich description, it is necessary to sow the seed early in the month of October, as real gardeners know that spring sown seed will not flower half as well as that put down in the fall—it should be sown in a little bed by itself, of light rich soil, well pulverized with the spade and rake—on the approach of winter cover it with straw or brush as you would spinnage, which remove in the month of April, after which keep the ground loose and clean. Larkspurs should not be transplanted." A 12½ cent paper embraces all the varieties mixed together.

BULBOUS ROOTS.

A superior collection of BULBOUS ROOTS, consisting of Hyacinth and Tulip Roots of various sorts and colors, Narcissus, Ranunculus, Crocus, &c. Printed directions will be furnished.

Now receiving from our Seed Garden, Europe, &c. a full collection of GARDEN SEEDS, growth 1835, among which are many sorts fine Peas, Onion Seed, Parsnip, Carrot, Beet, Yellow Turnip, Radish, &c.

Also for sale—500 dozen POTATO ONIONS, a very mild Onion and immense product. They should be planted about the last of October.

R. SINCLAIR, Seedsman,
Light, 4 doors N. of Pratt st.

oc 13

RUFFIN ON CALCAREOUS MANURES,
SECOND EDITION, just received at this office.

ALSO,

A few pounds of the celebrated SKINLESS OATS, price 50 cents per lb. said to produce 80 bushels per acre.

R. SINCLAIR, jr. Seedsman,
connected with this office

oc 13 2t

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,	bushel.	2 50	—
CATTLE, on the hoof,	100lbs.	5 00	6 00
CORN, yellow,	bushel.	—	84
White,	"	—	84
COTTON, Virginia,	pound.	18½	—
North Carolina,	"	—	—
Upland,	"	18½	20
FEATHERS,	pound.	37	40
FLAXSEED,	bushel.	1 25	1 37½
FLOUR & MEAL—Best wh. wh't fam	barrel.	7 25	7 75
Do. do. baker's,	"	6 75	7 25
Do. do. Superfine,	"	6 25	6 50
SuperHow. st. in good de'd	"	6 25	—
" wagon price,	"	—	6 12
City Mills, extra,	"	—	6 37
Do.	"	—	6 25
Susquehanna, firm & scarce	"	—	6 25
Rye,	"	4 50	4 62
Kiln-dried Meal, in hhds.	hhd.	19 00	20 00
do. in bbls.	bbl.	4 37½	4 50
GRASS SEEDS, red Clover,	bushel.	5 00	5 50
Timothy (herds of the north)	"	2 75	3 25
Orchard,	"	2 25	3 00
Tall meadow Oat,	"	2 00	2 50
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.	—	15 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
Hogs, on the hoof,	100lb.	7 00	7 25
Slaughtered,	"	—	—
Hops—first sort,	pound.	12½	—
second,	"	10	—
refuse,	"	8	—
LIME,	bushel.	33	35
MUSTARD SEED, Domestic,	"	5 00	6 00
OATS,	"	32	34
PEAS, red eye,	bushel.	—	—
Black eye,	"	—	1 25
Lady,	"	—	—
PLASTER PARIS, in the stone,	ton.	—	3 50
Ground,	barrel.	1 25	—
PALMA CHRISTA BEAN,	bushel.	2 00	—
RAGS,	pound.	3	4
RYE,	bushel.	75	—
Susquehanna,	"	none	—
TOBACCO, crop, common,	100 lbs	4 50	5 00
" brown and red,	"	5 00	7 00
" fine red,	"	7 00	9 00
" wrappery, suitable	"	—	—
for segars,	"	5 00	10 00
" yellow and red,	"	8 00	12 00
" yellow,	"	9 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	4 00	—
" ground leaf,	"	5 00	8 00
Virginia,	"	5 00	10 00
Rappahannock,	"	—	—
Kentucky,	"	8 00	14 00
WHEAT, white,	bushel.	1 28	1 32
Red,	"	1 10	1 32
WHISKEY, 1st pf. in bbls. }	gallon.	37	37½
" in hhds. }	"	34	—
" wagon price,	"	33	—
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 50	—
To Wheeling,	"	1 75	—
WOOL, Prime & Saxon Fleeces, ...	pound.	62 to 75	32 to 34
Full Merino,	"	52	62 30 32
Three fourths Merino,	"	47	52 28 30
One half do.	"	42	47 26 28
Common & one fourth Meri.	"	38	42 25 25
Pulled,	"	38	42 26 28

VALUABLE STOCK FOR SALE.

A FULL-BRED Durham short horn yearling BULL, a very superior animal; a 7-8 blood, same age; also two COWS, 4 years old, 3-4 blood, in calf by a full-bred Bull. Pedigrees given in full. Applications for any of the above cattle to be made to the Editor of the Farmer and Gardener, by whom the terms will be made known.

Letters from a distance must be post paid.
June 30th.

FRUIT AND ORNAMENTAL TREES, SHRUBS, &c.

ROBERT SINCLAIR, successor of Sinclair & Moore, in this department of the business of the firm, offers for sale at his **NURSERY**,* there miles east of the city of Baltimore, where the proprietor resides, and will be pleased to show customers his extensive assortment of Apples, Peaches, Plums, Cherries, Apricots, Pears, Quinces, Gooseberries, Catawba and other Grapes, Plants and Cuttings; also, Ornamental Trees and Shrubs, among which are the much admired *Morus Multicaulis*, and Italian White Mulberry for feeding Silk-worms and ornament; the Chinese Ailanthus, or Tree of Heaven, English Elm, Sugar and Silver leaved Maple, Horse Chesnut, Madeira Nut or English Walnut, silver leaved Poplar, Catalpa, European and American Linden, Balsam Fir, Weymouth or white Pine, European and American Larch Trees, Arborvitæ, a large and splendid assortment of Hardy and Indian Roses, and Ornamental Shrubs, Plants, mostly of large size and very thrifty, occupying an extent of about 12 acres.

The questions having been repeatedly and seriously put to him by persons residing in Baltimore, whether he had any Peach or Apple Trees old enough to transplant, and believing, therefore, that if persons living within three miles of his nursery, were ignorant of these facts, that others more remotely situated might be expected to be equally uninformed, he has thought it would not be inopportune to make a statement of the number of some of the prominent articles on hand, and having counted the same, reports the following, among numerous other varieties, as ready for transplantation:

Grafted Apple Trees of all sizes,	2,120
Budded Peach do. of 1, 2 and 3 years old,	16,080
Balsam Fir, Silver Fir, or Balm of Gilead,	500
English Lime or Linden Trees, imported last winter, 4 to 6 feet high,	500
English Gooseberries, 20 of the best sorts and largest fruit,	500
English or Scotch Larch, 3 feet high,	500
<i>Morus Multicaulis</i> , or new Chinese Mulberry, so highly prized for feeding silk-worms, as also for ornament,	2,000
Yellow Locust Trees from 6 to 10 feet, best sort,	2,000
Catawba, Isabella, and other grapes plants—many three years old, and would bear next year if removed this fall,	2,000
Vines, Creepers, Asparagus, Rhubarb, (for tarts and pies), Plants; hedging thorns, &c.	

All sold at low prices, as will appear by his catalogue just published, and to be had gratis of the proprietor, or at the Maryland Agricultural Repository of Robert Sinclair, junior—or they will be sent by mail if requested.

The proprietor would prefer that all orders intended for him, unless more convenient through some other channel, should come through the agency of R. Sinclair, junior, Light, near Pratt street.

Every possible care will be observed by him towards every order with which he may be favoured, it being his intention to do every thing within his power to promote the interest and give satisfaction to his customers. All purchases made of him will be delivered in town, when desired, free of cartage.

All plants, trees, and other articles purchased of him, after delivery at the nursery, or as per order, are to be at the risk of purchasers, as it cannot be presumed, that, after he shall have faithfully executed his orders that he can be held responsible for miscarriages and accidents over which he has no controul. oc 13

*The best way to go to the Nursery is out N. Gay st. taking the Bel-Air or new cut road, for about a mile, where there is an index board pointing in the proper direction, other indexes or sign boards further on, will indicate the right road.

OYSTER SHELL LIME.

ORDERS for any amount of the above valuable article will be received and promptly filled if left at this office. The incalculable value of lime as a manure is so well known that it is useless to dwell upon it in this advertisement. It will be delivered at any convenient landing place on the Chesapeake bay or its tributary waters, which may not be more than 70 miles distant from *Worton Creek*, Kent county, at 8 cents per bushel. Unburnt shells delivered at 4½ cts. per bushel. se 8

GREAT STOCK FAIR AND SALE.

THE proprietors of the *Farmer & Gardener*, Baltimore, will hold a FAIR for the sale of Stock of all kinds on SATURDAY, the 24th, and MONDAY, the 26th day of October, inst at those commodious and eligible lots adjoining the Canton Race Course. They have been governed in their selection of this situation, by its convenient distance from the city, easy approach either by land or water, being distant from the heart of the city not more than two miles, and by the great convenience of transportation thither—there being a steamboat regularly running there from the city every hour in the day, from 10 o'clock, A. M. at the moderate charge of an elevenpence for each person.

The proprietors have already entered for sale at their Fair, the following valuable ANIMALS, viz.

BULLS.

No 1. The improved Durham short horned Bull *Leon*, bred by Wm. H. Freeman, Esq. of Baltimore, Md.—Calved on the 8th of August, 1830, now in possession of S. Canby, of Woodside, Del.

Leon—is by Gloucester, dam *Flora*.

Gloucester—was imported in July 1826, by Mr. J. H. Powell, calved Feb. 28, 1825 (bred by J. Whitaker, Esq. one of the most celebrated breeders in England) by Frederick, dam *Adela* (bred by Mr. Whitaker: gave with her first calf 24 quarts per day) by Orpheus; g. d. Alfred (bred by Mr. Hestler, gave 24 qts. per day) by Alfred, (200 guineas was refused for Alfred) g. d. by Windsor g. g. g. Old Daisy) bred by Mr. C. Collins, (gave 32 qts. daily) by Favourite, sire of Comet: g. g. g. g. d. by Punch; g. g. g. d. by Hubback.

Frederick—roan, (bred by Mr. Charge) got by Hulton, dam, Orbit, by Comet sold for 1000 guineas: g. d. Splendor by Comet; g. g. d. Flecked Twin by Major; g. g. d. Red Simon by Favourite; g. g. g. d. Flecked Simon by Bartle; g. g. g. g. d. Old Simon, (bred by Mr. Charge) descended from the Studley White Bull.

Hulton—(Bred by Mr. Charge,) got by Newton, dam Meteor by Comet.

Newton—(bred by Mr. Charge,) got by Comet, dam Fanny by Mr. Charge's Grey Bull.

"Comet"—red and white roan, calved in 1804, (bred by Mr. Collings,) got by Favourite, dam young Phoenix, by Favourite; g. d. Phoenix, by Foljambe, &c. &c. (Comet was sold for 1000 guineas at Mr. Collings' sale Oct. 11th, 1810).

"Gloucester's" pedigree can be found more at large in a work called "Hints for American husbandmen, published by the Pennsylvania Agricultural Society," in 1827, he is also recorded in the English Herd Book.

"Flora"—(dam of *Leon*) was got by Sampson, dam Betty, g. d. Old Betty; Sampson by son of Ossian, d. by Comet; Ossian by Favourite; by Bolingbroke; d. Phoenix by Foljambe; g. d. by Alcock's Bull; gr. g. d. by Smith's Bull; gr. gr. g. d. by Jolly's Bull.

"Flora's" pedigree can also be found at large in the "Memoirs of the Pennsylvania Agricultural Society for 1824," and is likewise recorded in the English Herd Book.

J. H. Powell, Esq. considers "Gloucester" one of the finest Bulls ever imported by him. He was purchased by Mr. Freeman for 1200 Dollars.

No 2. "*Hector*"—dark red, calved Nov. 22, 1833, by Parson, dam Red Rose, gr. d. Prize by Denton, Parson (owned by H. A. Carpenter, Esq.) got by Bishop, dam Moss Rose (imported in 1821, bred by Mr. Ashcrop) got by Phenomenon, &c.

No. 3. *Major*—Red and white, calved March 8, 1824, by Duke, dam Fanny, (No. 4) by Parson; d. Isabella by Lothario.

No. 4. *George*—Red and white, calved March 13, 1834, by Duke, d. Orphan by Lothario, gr. d. by Billy Austin.

No. 5. *Uncas*—White, calved May 5, 1834, by Leon (No. 1.) dam Prudence by Parson; gr. d. Patience; g. g. d. Stella; g. g. g. d. Star by Denton; Star gave 40 quarts of milk per day.

No. 6. *Peter*—White, calved May 5, 1834, by Leon; dam Isabella by Lothario; d. Meg by Billy Austin.

No. 7. *Rufus*—Roane, calved August 28, 1834; by Leon, d. Flora (No. 6) by Parson; gr. d. Meg by Billy Austin.

No. 8. *Henry*—Red and white, calved March 1, 1835, by Leon, d. Clementina (No. 1) by Lothario; g. d. by Denton.

No. 9. *Ned*—White and red, calved 12, 1835, by Leon, dam Fanny, (No. 4) by Parson; g. d. Roan by Lothario.

No. 10. *Bob*—Roan, calved June 9, 1835, by Leon, dam

Kate (No. 5) by Parson; g. d. Chance by Lothario. COWS.

No. 1. *Clementina*—dark red; by Lothario, d. Star, by Denton. Lothario was gotten in England by George; d. Moss Rose, (imported in 1821) by Phenomenon, &c.

No. 2. *Corra*—red and white; by Parson, d. Clementina, (No. 1.)

No. 3. *Hetty*—white and red; by Parson, d. Meg, by Billy Austin.

No. 4. *Fanny*—dark red; by Parson, d. Roan, by Lothario.

No. 5. *Kate*—brindle, by Parson, d. Chance, by Lothario.

No. 6. *Flora*—red; by Parson, d. Meg, by Billy Austin.

No. 7. *Laura*—red and white; by Parson, d. Gypsey, by Parson.

No. 8. *Lucy*—red and white, calved April 22d, 1834; by Leon; d. Helen, by the Hon. J. J. Milligan's Red Bull.

No. 9. *Caroline*—roan, calved July 18, 1835; by Leon; d. Flora, No. 6.

No. 10. *Sally*—roan, calved July 28, 1835; by Leon, d. Laura, (No. 7.)

The pedigrees of all of the above animals will be given in full to purchasers, well authenticated.

In addition to the above they will have for sale at the fair from 16 to 20,

FULL BLOODED DEVONS,

Warranted pure and of the best blood in the country.

They respectfully solicit consignments from the owners of any of the following kinds of stock.

Improved *Durham Short Horns*—full blooded, and grades, whether imported or raised in this country.

DEVONS, do do do.

SUPERIOR OXEN,—well broken, whether improved imported or native kinds.

Superior MILCH COWS of native stock.

SHEEP—Improved Bakewell, Saxon, Merinoes—full blooded, and their respective grades.

Superior HORSES of all kinds.

MULES, JACKS and JFNNEYS.

Various breeds of HOGS, remarkable for size and taking on fat.

In every instance, where the stock to be sent, are of the imported full bloods, or of their respective grades, certificates of pedigree, well authenticated, must be sent, as it is the wish of the proprietors to make their FAIR a mart where the agriculturists of the country may resort with a certainty of getting genuine articles—just such animals as they may believe they are buying.

Should the proprietors of the *Farmer & Gardener* be met with that spirit of generous reciprocity, which they believe due to the present effort, it is their purpose to hold ANNUAL or SEMI ANNUAL FAIRS, believing that they will not only conduce to the immediate interests of farmers and those engaged in raising stock, but to the country at large; for they hold it to be a tenable position, that whatever tends to advance one great national branch of industry, is necessarily promotive of the whole. The convenience to the agricultural community, of such an establishment as a great mart to which they may resort with the certainty of selling any fine animals they may have to dispose of, or of procuring such as they may desire to purchase, will be obvious at the first blush.

Animals coming by water can be landed at the Canton Company's wharf, adjoining the Fair ground. Owners of animals will send their own keepers. Hay, grass, and such other feed as may be desired, can be procured on the premises at fair market prices. Or if owners should prefer, a per diem for livery will be charged.

Seven and a half per cent commission upon all sales will be charged, and for each animal offered for sale that may not be sold, the usual offering fee.

A careful person will be on the premises to take charge of the animals as they may arrive and allot them their respective places. JOHN I. GROSS, Auct.

ADDITIONAL.

Also, from the herd of *John Barney*, Esq. one of the most celebrated breeders in the country, a few of his

FULL BLOODED

Improved short horn Durhams.

Among which are a cow and calf—the cow a superior animal both for the pa l and as a breeder; a few choice DEVON COWS and CALVES. Besides these, some of his splendid BAKEWELL SHEEP.

Several SUPERIOR PIGS.

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THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 25.

BALTIMORE, MD. OCTOBER 20, 1835.

Vol. II

THIS publication is the *successor* of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, OCT. 20, 1835.

SILK MANUAL.

The proprietors of the *Farmer and Gardener*, Baltimore, have in the press, and will speedily publish, a complete *Manual of the Mulberry and Silk culture*, compiled from the best and most authentic sources. As the object is the promotion of a great public interest, the cost will be moderate.

CULTURE OF THE PEACH.

We insert to day, upon this subject, a highly interesting paper from the pen of one of the best informed practical farmers in the country. The devastations which have been made in Peach orchards by their deadly enemy, the worm, for the last few years, give to the views he has taken, increased interest. As we have upon more than one occasion before observed, there are but few, if any, better qualified to be a teacher in the sciences of Agriculture and Horticulture, than is Agricola, and from his enthusiastic devotion to these pursuits, his high capacity, observing mind, and discriminating judgment, we should be disposed to place the utmost reliance on the solidity of any opinion he may form, either with respect to preventive means to be used to preserve the peach from the destructive inroads of their worse than cossack-foe, or to the proper mode of culture.

A PATTERN FARM.

We observe with mingled feelings of pleasure and pride, that the Hon. James Barbour, of Virginia, has submitted a proposition to the people of that enlightened and patriotic state, to found a professorship of Agriculture in her University, to be connected with a *pattern farm*, and such a paper as the *Farmers' Register*.

We have long indulged a belief not only of the utility of the two first branches of his proposition being established in every state in these United States; but we had made up our minds to submit the project through our columns for the consider-

ation of the people of the country. The plan which we had fallen upon, and which we will here briefly develop, is this:

1st. That each state should procure a given number of acres to be converted into a *pattern farm*, whereon all experiments in Agriculture should be made for the common benefit of the people of the several states:

2d. That there shall be attached to each farm, as a professor of Agriculture, a practical Chemist, whose duty it shall be to lecture, at stated periods, to a class of scholars, to be composed of poor and other youths, to be selected according to a fixed ratio, from the several counties of the respective states, upon the science of chemistry as applicable to the purposes of agriculture.

3d. Attached to these farms there should be, also, a practical farmer, whose business it shall be to conduct the ordinary farm operations, and carry into effect all the orders of the Professor, and make such experiments as he may require him to perform.

4th. It should be the duty of the professor to make a fair analysis of any soils which might be sent to him by private individuals, free of cost, and make out a certificate of their component elements; prescribe the kinds of manures best adapted to their melioration, and make a record thereof, in a book to be kept for that purpose. All his analyses, experiments, and illustrations to be made in the presence of the students, who would thus become practically acquainted with one of the most interesting and useful sciences in its applicability to the arts of husbandry.

5th. The students as a compensation for their board and tuition, to be compelled to labor a given number of hours in each day on the farm.

6th. That one-fourth, or some other designated portion of the farm shall be set aside, for the Mulberry and Silk culture, to be attended to by the students as are the other parts of the farm, under the direction and superintendence of the Agricultural Professor, and Farmer, the profits to be applied to the extension of the benefits of the institution.

7th. That there also be attached to the establishment, a *Horticultural branch*, to be under the direct management, superintendence, and direction, of a practical and theoretical horticulturist

and gardener, who shall be under the control of the Professor of agriculture. It should be the duty of the Gardener to select and cultivate, all rare, choice, and approved fruits, vegetables, fruit and ornamental trees, shrubs and flowers, whether of domestic or foreign origin, and by an enlightened cultivation and improvement, (where susceptible of them,) to infuse a spirit of emulation throughout the country.

8th. The students only to be allowed to remain at the institution one year, and not be received before the age of 18 years, an age best suited to derive permanent benefit from the course of instruction they are to receive, and to communicate it to others on their return to their respective homes.

This is a birds-eye view of the plan we had marked out in our mind, and we submit it under the most solemn convictions of its importance to the well being of the confederacy, and, therefore, urge its consideration upon the favorable notice of the people of the United States, in the fond hope that they may be induced to examine the subject fairly and impartially, confident if they do so, they will lend to it their sanction and zealous support.

Agriculture, it must be admitted, is the most important department of all human industry, and as such is entitled to every consideration. It is equally true, that it has been pursued upon wrong principles in this country. Every field almost, of long continued cultivation, show, by diminished products, the effect of this erroneous system of cultivation. Such being the case, a remedy becomes indispensably necessary, and we believe that one is most likely to be found in an Institution which would send out *annually* its fifty or an hundred intelligent, well instructed youths, to disseminate throughout the respective states of the Republic, the correct principles and most approved modes of culture.

We were shewn yesterday a sample of wool from an imported Bakewell buck of most superior texture. He cost \$200, and his present owner has engaged several of his lambs out of ewes from Mr. Barney's breed for \$150 each.

INTERESTING TO FARMERS.

In our last number we called the attention of our readers to the advertisement of the Hon. Charles A. Barnitz, of York, Pennsylvania, offering

his stock of Short-horned cattle for sale. In that notice we particularly directed attention to the extraordinary cow *Flora*. The astonishing product of this noble animal excited so intense a curiosity to ascertain her price, that, to gratify it, we found it necessary to address a letter to her proprietor to obtain information upon that point and some others. In reply, we learn that Mr. Barnitz has four half-bloods, four three-quarters, three seven-eighths heifers, and several seven-eighths calves. The cows are all fine milkers, and in high order. The prices for those that are mature will be from \$50 to \$75; heifers from \$40 to \$50; calves \$20 to 30.

As to *Flora* the price is \$300. This will not be thought high when it is considered that her calves bring at one year old, from \$200 to \$250. *Flora* is in prime order, and still gives considerable milk, and is now about 6 years old. She has what is generally approved of, one-fourth of *Devon* blood and three-fourths *Improved Durham Short-horn*—her colour is red and white.—Her dam was a fine cow bred by Mr. Powel, called *Julia*. *Julia* was from an imported *Devon*, by the celebrated Short-horn bull *Denton*. Mr. Barnitz bought *Julia* from Mr. Powel, when she was with calf by *Malcolm*, and *Flora* was the produce. *Flora*, when fresh in milk, gives from sixteen to twenty pounds of butter per week. The cream when taken from the milk house and while perfectly sweet, stirred with a spoon in a bowl produces butter in less than a minute, and the bulk of butter about the same with that of the cream.

Any person purchasing *Flora*, should also take another one or more belonging to Mr. Barnitz's herd, as she would travel in company and feed and keep better. Mr. Barnitz, would, we understand, let one or more of his half breds go to her purchaser at \$50 each, and deliver them in Baltimore.

In any sale which Mr. Barnitz may make of a high priced animal, it will be desirable that the purchaser or some one authorized by him, should examine the animal, so as to be satisfied as to her value, as he is unwilling that his estimate of value should govern.

Mr. Barnitz, has a young Bull 19 months old, got by a fine bull of Mr. Powel's stock, out of *Flora*. This bull is one-eighth *Devon*, and 7-8 *Durham Short-horn*, a beautiful red colour and very promising: he is now fit for service. His price, deliverable in Baltimore, is \$210. He has also, a fine 7-8 bull, now about 16 months old, he is by *Emperor*, from a very fine 3-4 blood milker. His price, deliverable in Baltimore, is \$100.

Although 1-8 in blood makes a great difference in price, yet it will be found that this bull in his points and appearance is not inferior to a full blood. He will be of large size, and coming from so distinguished a sire as *Emperor*, will give him a credit and character any where. *Emperor* was bred by Mr. Barnitz, is now six years old, and is so large and fine, that Mr. B. lately sold him to some young men to be taken through the country for exhibition. He weighs alive 3710 pounds, which is heavier than the celebrated English *Durham Ox* at the same age, and much heavier than the great *Ox Columbus*. He is said to be the most magnificent animal ever seen in this country. He is now at Philadelphia, and we have some hopes that he will be on at our Fair at *Canton* on the 24th and 26th instants.

To gentlemen at a distance desirous of obtaining any of the above described cattle from Mr. Barnitz, we respectfully tender our agency. Letters post paid on the subject will be promptly attended to.

Fall Ploughing.—1st. In no other way can land be so completely pulverized as by exposing it to the action of frost through the winter.

2d. It is useful in eradicating weeds, elders, and other bushes—their roots being killed by the frosts.

3d. It is the most speedy method of eradicating that spreading curse, *Steer Crot*, or Red Root. Where this is the design of fall ploughing, it should be done early, and the land harrowed, so that all the seed in the ground may vegetate. Ploughing it under in the spring ends the matter.

4th. The land is soft, our teams strong, feed plenty, and labour cheap.

5th. It forwards spring business wonderfully, enabling me to sow barley before I otherwise could begin to plough for it, and gives me leisure for the better performance of all the pressing concerns of this most busy season.

Farmers, try it.—*New Castle Gazette*.

Bene Plant—(SESAMUM ORIENTALE.)

To the Editor of the Southern Agriculturist.

“WALNUT GROVE, District of }
Orangeburg, July 7, 1835. }

Dear Sir—The leaves of the Bene Plant, (*Sesamum orientale*) soaked in water for the space of one hour, afford a rich and bland mucilage, equal if not superior to gum arabic. This mucilage sweetened with loaf sugar and taken in small doses, has been found efficacious in allaying the troublesome cough and wasting diarrhea in *Phthisis Pulmonalis*, or pulmonary Consumption. Having witnessed its soothing effects in a very advanced stage of this formidable disease, I can, with confidence, recommend it. Simplicity is not among the least of its recommendations, I rather think it ought to be its greatest.

Very respectfully, dear Sir, your friend and fellow-citizen,
MEDICO BOTANICUS.

THE BLIND STAGGERS.

Having seen by a notice in the *Village Herald*, some weeks since that this alarming disease was prevailing in Somerset County, Md. and had then, already killed from 60 to 70 horses, and seeing also that communications were solicited, we prepared the subjoined paper and sent it thither for publication, preferring, as the disease was rapid and deadly in its progress, that medium to our own journal, in the hope that as it would thus appear earlier where the malady existed, it would thereby stand the better chance of doing more substantial benefit. Our object having been attained, we insert it to day, in order that it may be more generally spread abroad, and be available wherever the ailment may present itself.

BLIND STAGGERS IN HORSES.

The *Village Herald* of the 22d inst., says that a large number of Horses had died, in Somerset co. of this state, of what is termed *blind staggers*. That the number had already reached 60 or 70, and many were laboring under the disease. The editor having requested to be informed of a remedy, we take the liberty of making the following observations:

This disease is one which often defies the most skilful treatment, and is, indeed, one in which death generally supervenes. The exciting cause of this disease is not easily to be traced. It has been produced sometimes in the heat of summer, when the Horse has been too fat, or full of blood, from over heating, causing an influx of blood to the brain. Dr. Harden, of Morgan county, Georgia, though he does not advance the opinion, inclines to the belief, that it results from water getting in the ear of the animal; that he had always noticed the attacks to follow a rainy spell. But though they differ as to the cause, all the authors we have consulted prescribe the free use of the lancet, even to faintness, and the most active purgative medicines. The purge which acts most quickly being considered the best, and that is said to be the *Croton nut*, powdered at the time, and given in a drink, in the dose of half a drachm, to be followed by smaller doses of ten grains each, every six hours, with plenty of injections of warm soap and water, until the bowels are well opened. If the *Croton nut* is not at hand, *aloes* may be dissolved in hot water, 1 oz. at the first dose, and afterwards 1-4 of an oz. every four hours until purging is produced. This effect being produced, *fox glove* and *tartar emetic*, in doses of a drachm each, three or four times a day should be given. In addition to this treatment, the back of the head should be blistered. From the general spread of this disease in Somerset county, and from the season of the year, we should, ourself, be inclined to believe that it is not referrible to fat in the afflicted animals, or to their being over-heated; nor have we much faith in its proceeding from water in the ear. We believe it owing to some vitiated condition of the food or atmosphere, inducing a tendency of blood to the brain; but be the cause what it may, depletion from the veins and bowels is the only

treatment in which security can be found. If the Horses which have been attacked have been running in pastures, they should be immediately stabled, so as to be protected from the deleterious effects of the pastures or the noxious miasmata as much as possible. If the stables were fumigated before the Horses were put into them, with muriate of soda, (common salt,) manganese and vitriolic acid, much good would ensue. It would be well also to sprinkle solutions of chloride of lime over the stable floors twice a day for a week or two.

We had prepared the above article when a friend put into our hand Dr. Mason's "*Pocket Farrier*," by which we perceive he ascribes the disease to Horses feeding on grass in the spring and fall, late at night and early in the morning, at which time he says the fields and pastures are covered with a poisonous web, which is spun and spread upon the grass by a small spider. So rapidly, so industriously, does the little insect work, that in the space of one night not a blade or spire of the grass is left untouched. This web, catching the dew drops on its bosom, causes the fields in the morning to glisten and sparkle as if covered with a thin sheet of ice. A Horse, says Dr. Mason, that feeds upon a pasture in this situation must, of course, collect large quantities of this *web* and *dew*, and very often the spider itself. They act upon the Horse, producing delirium, giddiness, apoplexy, and sometimes death. The lungs, he says, appear to be the principal seat of the disease; upon dissection, are found enlarged, covered with large brown spots, smell offensively and have the appearance of mortification.

The large quantity of poison taken into the stomach, says the Doctor, acts upon its nerves, and by sympathy act upon the large nerves of the head, which accounts for the dull, giddy and dejected countenance of the animal, and induced many to believe the disease was confined to that part alone. The poison is then removed from the stomach by the activity of the lymphatic and absorbent vessels, thrown into the circulation of blood, diffused over every part of the system, and finally carried by the arteries into the lungs through which all the blood in the body of a Horse passes many times in an hour and undergoes a change. Sometimes a *determination of blood to the head takes place, which generally ends fatally*, producing furious delirium, the Horse throwing himself about with great violence making it dangerous for any person to venture near him.

So much for Dr. Mason's *Theory*.

Now for his

Symptoms.—The symptoms of the staggers are drowsiness, inflamed eyes, half shut and full of tears, the appetite bad, the disposition to sleep gradually increased, subtleness, a continued hanging of the head, or resting it on the manger, rearing, falling and lying in a state of insensibility, walking a circle for a considerable length of time, the ears hot, with a burning fever, &c. &c.

Now for his

Remedy.—Take from the neck vein, a *half a gallon of blood*, three times a week, take of sassafras tea, three half pints; plantain juice, half a pint, assafœtida, half an ounce; saltpetre, one teaspoonful; mix and give them as a drench three mornings in a week; give an injection composed of one pint of meal, two quarts of water, one quart

of molasses and one spoonful of hogslard—let the Horse be moderately exercised, and whenever he is standing, should be well rubbed; give a wash twice a week, composed of one gallon of bran, one table spoonful of sulphur, one teaspoonful of saltpetre, one quart of boiling sassafras tea, and an eighth of an ounce of assafœtida; not permitting the horse to drink cold water for six hours afterwards. Should he be much mended by this treatment, nothing more will be necessary, except feeding him on bran or a light food of any kind, but should he appear to receive no benefit from these attentions, in four or five days, take of *calomel* twenty-five grains, of *opium* two drachms, *camphor* two drachms, powdered *fennel* seed one drachm, of syrup of any kind, a sufficient quantity to make the ingredients into a ball, which may be given every morning for 4 or 5 days, by which time the horse will get well, if his disease will admit of a cure.

And now for his

Preventive.—Horses that are confined in a stable never have the staggers; consequently it would be advisable for every person, whose situation will admit of it, to confine their horses particularly at night, during the fall and spring months.

[For the "Farmer and Gardener."]

CULTURE OF THE PEACH.

Mr. Editor.—Among those delicious fruits of the earth, with which a kind Creator has strewed our path, as it were, to lighten some of the burthens of life, the PEACH holds a high rank. The ease with which the *tree* is reared, the early age at which they reach *maturity*, and the great variety of soils and situation in which this delightful production can be produced in high perfection, with the salutary qualities of the fruit, all entitle it to the early and careful attention of the farmer and gardener. In the genial sun of the south, it is found possessed of most aroma and delicious juices. That sun which gives to the cane, the orange, and the fig, their delicate, and highly aromatic essences, produces the *peach* of superior excellence. In this climate, it is not uncommon to see, on the *second* year from depositing the seed in the earth, the large fruit bending the feeble tree to the ground. The ease with which this fruit is produced in this latitude, and in the soils of the country, has hitherto prevented our agriculturists from bestowing on the *preservation* of the *tree*, and the improvement of the fruit, that care it legitimately claims. The varieties are so *many* and *excellent*, that it ranks amongst the few things, in the goodness of which, all are *perfectly satisfied*—for they often repeat, in being solicited to attempt the *improvement* of the peach—"it is good enough." I have perhaps, more than any other individual yet in the state,* made exertions to get together, the *finest varieties* to be found in the country, and in the adjacent states—as also, to procure them from the seed of the *finest new specimens*. My collection has been much seen and admired, and not less, my *success* in producing trees of fine vegetable *appearance*, and *growth*, with freedom from the too common misfortune following that tree, in every climate—the *worm*. In prosecuting a favorite object, of

* Alabama.

bringing together, and saving, all *superior varieties* that I could find, I was compelled to adopt the mode of raising from the *water sprout*. In the same enclosure, containing some hundreds of trees, I planted *two rows of sprouts*, as I occasionally could collect them from the 15th November, until the 1st of February. Those rows contained about *two hundred*. My mode was, to cut the sprout, as near *twelve inches* in length, as I could guess, and insert them in the earth, well pulverized, *nine inches*—say about 12 inches apart. I was singularly successful that season in the cuttings taking root—few died. On the second year, I thinned out the rows, leaving the remaining ones stand, about *twelve feet apart*. There was not a single cutting put in the ground, but the fruit of which, I had previously handled and tasted.—Those taken out of the rows were planted promiscuously, amongst trees raised from the seeds, scions, &c. About the *fourth* year, I discovered in my orchard some trees dying—on examination I uniformly found the *worm* at the *root*—but my attention was attracted by the circumstance, that *not one of those raised from the water sprout*, in either of the *two rows*, had died or appeared sickly. *Three years* more have elapsed, and *not one yet affected*. I sat about, during the last year, to ascertain if possible, this, to me, singular circumstance. I had satisfactorily discovered, that the *tree* and *fruit* of those raised from the sprout had improved, the first in a healthy, vigorous growth, and the last, in size. The *ground* in which my trees are planted, I consider, cannot be excelled in its *natural state*. I never cultivated it more than one slight ploughing, early in the spring, and planting, or sowing, an early crop of *field peas*, which takes the ground and *shades* it before the *hot weather* comes on—and those I eat off with *pigs*, suffering the *vines* to rot on the ground. About the roots of the trees, for the distance of *three feet*, the *hoe* keeps the *surface* of the ground *loose and clean*. Early in the spring, a shovel full of leached ashes, is put to the roots of each tree—and a handful of tobacco *leaves and stems*, wrapped around the root, *just at the ground*—on which the *ashes* are thrown. The number that have died, is comparatively, but few—of those raised from the seed, or scion, and without a *single exception*, they put up a *much finer growth*. And here I must remark, that I have never known the *second growth* killed. I am inclined to believe that the *worm kills the tree above the root but once*. On this, I would be glad to hear the experience of others. So far it is my *experience and observation*, and if correct, I believe I am the *first* that observed the circumstance, for I have never heard it before noticed. Washing the body of the trees with *strong soap suds* in the spring, I highly approve of, from the palpable effects I have discovered on the *bark and growth*.

On examining every tree that died with me, and with many others in the meridian of vegetable life, I found, uniformly, that the *worm* had attacked the tree, and deposited himself *at, or near, the surface of the ground*, and just where the *bark of the root*, and that of the *stem of the tree joins*.—From this, I found *no exception*. Now if any person will examine a tree raised from the cutting, or *water sprout*, he will find, uniformly, that

the roots project and come out from the lower end, some distance before they take a horizontal direction, consequently, the junction of the bark of the roots, and stalk or stem of the tree, is nine inches at least below the surface.

In selecting a site for an orchard, both tree and fruit call for land of moderate quality. Oak, pine and hickory lands, or oak and hickory, with a good red loamy clay foundation, I prefer. Lime, either what is called rotten lime stone, pulverized by exposure to the atmosphere, or burnt, and slaked lime, applied to the roots moderately, and worked in with the hoe, I have found excellent, say three feet round the tree. In pruning this tree, and in trimming, I observe one rule. In the winter of the first year, or rather, just before the sap begins to rise, I cut the first year's growth off, at three feet from the ground. As the young shoots put out, I select four of the strongest, pointing to the cardinal points, and keep all others clean off that year, with a sharp penknife, cutting always carefully, and close to the bark—the next year at the same time, I cut those four off, at about two and a half feet, and observe the same rule—the third year, I cut off at three feet, and let the head of the tree take its own direction. After this, I have but one rule, viz: to keep off wood, and by cutting it off, when the smallest penknife is sufficient to do it.

By this rule, I prevent my trees from breaking down with the weight of fruit. Its excellence and size, the country can attest. I never suffer any thing but shoots to go into the orchard, and poultry, the wings of the last cut. On no condition will I suffer the bark of the body, or limbs to be injured, or rubbed even—except by the brush, or a soft cloth and the suds. My fruit must come off with a slight stroke of the hand, against the body of the tree, or a very slightful—or it stays on—no beating and slashing amongst my trees. If they are worth planting, they are worth taking care of—and my hogs account elegantly for the fruit, that I or my friends, cannot consume. I do not believe the grub will descend sufficiently into the earth, to find the place of attack, or if a deposit of the egg is first made, the depositor, be him whom he may, will not go down to find the right place for him. I hope that the lovers of good peaches, will allow the thing a fair trial, and if I deserve it, give me the pleasure of saying, that I have discovered something, and added to the sum of human happiness—if but a mite.

AGRICOLA.

ELEMENTS OF PRACTICAL AGRICULTURE.

By David Low, Professor of Agriculture, &c.
SUCCESSION OF CROPS.

As crops of the cultivated plants succeed to each other upon the same ground, a question to be determined is the order in which the different kinds should follow each other.

All plants which are cultivated, and which are carried from the ground where they are produced, tend to render the soil less productive, or, in the language of farmers, to exhaust it.

But plants which are suffered to decay, or which are consumed by animals on the ground on which they grow, do not exhaust the soil.—On the contrary, the decay of the stems and leaves of such plants, either naturally, or by the

consuming of them by animals, tends to add those decomposing organic matters to the soil which form one of the elements of its fertility.—This process may be imperceptible and slow, but it is that which Nature herself employs to form the soil, as distinguished from what has been termed the subsoil.

Sometimes this process of decay is counteracted by the singular natural provision, of a conversion of the decomposing vegetable into a substance which of itself resists decomposition—peat. But, with this exception, the tendency of the decay of vegetables upon the surface is to add to the fertile matters of the soil.

This is well understood in the practice of agriculturists. When the productive powers of a soil have been exhausted by cultivation and the carrying away of its produce from the surface, it is laid down to herbage, in which state the future vegetation which it produces tends, by its decomposition upon the surface, to renovate the productive powers of the soil. Land in this state is said to rest.

When land, however, has been impoverished by successive crops, and has become full of weeds, the laying it down to rest in that state is attended with less beneficial consequences than when the soil has been previously cleaned of injurious weeds, and fertilized by good culture. In the former case, the process of renovation is slow, if perceptible at all; the useless plants increase, and not those which are beneficial and afford food to pasturing animals. Land, when properly laid down to grass, therefore, tends to recover its wasted powers of production. Land not properly laid down has less of this healing property, and may be more full of weeds, and no richer when ploughed up again after a time, than when first laid down. Under good management, however, the laying down of cultivated land to grass, and other herbage-plants to be consumed upon the ground, is a means of resting the soil, and renovating its powers of production; and this mode of recruiting an exhausted soil being always at the command of the farmer, its application is important in practice. It is to be observed also, that the poorer soils require this species of rest and renovation more than those which are naturally productive.

The experience of husbandmen from the earliest times has shown, that the same kinds of plants cannot be advantageously cultivated in continued succession. The same or similar species tend to grow feebly, or degenerate, or become more subject to diseases, when cultivated successively upon the same ground; and hence, the rule which forms the basis of a system of regular alternation of crops is, that plants of the same or similar species shall not be cultivated in immediate succession; and further, the same rule has been thus far extended, that the same species shall recur at as distant intervals of the course as circumstances will allow.

All herbaceous plants whose produce is carried off the ground, which produces them, may be said to exhaust the soil upon which they grow. But all such plants do not exhaust the soil in the same degree; for after some species the soil is seen to be more impoverished than after others.

And not only do different species of plants exhaust the soil in a greater or, less degree than others, but the same species does so according to the different period of its growth at which the plant is removed from the ground.

When a herbaceous plant is suffered to mature its seeds, it exhausts the soil more than when it is removed before its seeds are matured. All herbaceous plants, therefore, when cut in their green state, that is, before they have matured their seeds exhaust the soil less than when they remain until they have ripened their seeds. Thus the turnip, when used in its green state, is one of the least exhausting in the agricultural class of plants to which it belongs; but the turnip, when allowed to remain upon the ground until it has ripened its seeds, is one of the most exhausting plants that is cultivated amongst us; and so it is with the rape and others.

Further, certain plants, by the larger or smaller quantity of manure which the consumption of them affords, are more or less useful in maintaining the fertility of the farm.

When herbaceous plants are suffered to mature their seeds, and when any part of these seeds is carried off the farm, the plant affords, when consumed by animals, a smaller return of manure to the farm than if the same plant had been cut down before it had matured its seeds, and been in that state consumed by animals. Thus it is with the turnip plant referred to. This plant is with us sown before summer. In the first season it forms a napiform root, and puts forth a large system of leaves. Early in the following season it puts forth a long stem, which bears flowers, and the seeds are generally matured about midsummer. If this plant is removed in the first stage of its growth, that is, after it has put forth its large leaves and formed its bulb, and is then consumed by animals, it returns a great quantity of manure; but if it remains until the second state of its growth, then the consumption of its stems and leaves returns scarce any manure. The juices of the root have apparently been exhausted in affording nutrition to the flower-stem, the flowers, and the seeds.

It is beyond a question, that, in order to bring a plant to its entire maturity, by the perfecting of its seeds, a larger quantity of the nutritive matter of the soil is sucked up by it than when it is brought only to its less advanced stages. When crops of plants, therefore, are suffered to arrive at maturity, they are greatly more exhausters of the soil on which they grow than when they are cut down while they are green; and if those seeds are in whole or in part carried off the farm, the crops are exhausters of the farm, as well as of the ground which had produced them. Were the ripened seeds to be wholly returned to the soil, it may be believed that they might give back to it all the nutritive matter which had been derived from it. But, in practice, seeds are employed for many purposes, and are generally carried off the farm which produces them. When this is done in whole or in part, the plants produced are in an eminent degree exhausters of the farm, as well as of the soil on which they have grown.

Further, certain plants, from their mode of growth and cultivation, are more favorable to the growth of weeds than other plants. The cereal

grasses, from growing closely together, and not admitting, or admitting partially, the eradication of weeds, are more favorable to the growth and multiplication of weeds than such plants as the turnip and the potato, which are grown at a considerable distance from each other, and admit of tillage during their growth, and whose broad systems of leaves tend to repress the growth of stranger plants.

Having these principles in view, certain rules may be deduced from them, or the order in which the crops of plants in cultivation in a country shall succeed to each other on the same ground.

1st. Crops consisting of plants of the same or similar species, shall not follow in succession, but shall return at as distant intervals as the case will allow.

2d. Crops consisting of plants whose mode of growth or cultivation tends to the production of weeds, shall not follow in succession.

3d. Crops whose culture admits of the destruction of weeds, shall be cultivated when we cultivate plants which favor the production of weeds. And further, crops whose consumption returns to the soil a sufficient quantity of manure, shall be cultivated at intervals sufficient to maintain or increase the fertility of the farm.

And, 4th. When land is to be laid to grass, this shall be done when the soil is fertile and clean.

These rules may be applied to the plants which form the subject of common cultivation in the fields. In this country, the plants chiefly cultivated on the large scale, are—the cereal grasses, chiefly for the farina of their seeds; certain leguminous plants, as the bean and the pea; plants cultivated for their fibres, as the flax and hemp; for their leaves, roots, or tubers, as the turnip, the cabbage, and the potato; and certain leguminous and other plants for forage or herbage. The plants of these different classes are yet to be described; and they are now only referred to with relation to the order in which they may succeed to each other in cultivation.

The 1st class of these plants consists of the cereal grasses. These are chiefly wheat, barley, oats, and partially rye. All these plants are in an eminent degree exhausters of the farm. They are all suffered to mature their seeds, and are wholly or partially carried away from the farm. Further, from the manner of their growth, and mode of cultivation, they all tend to favor the production of weeds. For these reasons, and on the general principle that plants of the same or similar kinds should not follow in succession, the cereal grasses should not succeed each other, but should be preceded or followed by some crop, which either exhausts the soil less, or admits of a more perfect eradication of weeds.

2d. The leguminous plants cultivated for their seeds, as the bean and the pea, are all exhausters of the soil.* They ripen their seeds, and these seeds are for the most part carried off the farm.—Some physiologists suppose that they are less exhausters of the soil than the cereal grasses. It is probable that they do exhaust the soil somewhat less than the cereal grasses. But the essential difference between them, when considered with relation to their effect upon the soil, is, that, from

their growth, and the manner of cultivating them, they are greatly less favorable to the production of weeds than the cereal grasses. By their broader system of leaves, they tend to stifle the growth of weeds more than the cereal grasses: and further, they admit of tillage during a great part of their growth. This is especially the case with the bean, [and maize] which is therefore regarded as a useful cleaning crop, and so is cultivated in rotation with the cereal grasses, as a mean of preserving the land clean.

3d. Hemp and flax, which are cultivated chiefly for their fibres, and all plants cultivated for their oils, are exhausters of the soil. They are suffered to form and ripen their seeds, and their stems afford no return of manure to the farm.

The next class of plants, from the large return of manures which the consumption of them affords, may be regarded as enriching or restorative crops, in contradistinction to the others, which may be termed exhausting crops:

1. The turnip, the rape, and other plants of the cabbage genus, cultivated for their roots and leaves, and consumed upon the farm.

2. The potato, the carrot, the parsnip, the beet, and other plants, cultivated for their roots and leaves, and consumed upon the farm.

3. The leguminous plants—the clover, the tare, the lucerne, and others—when cut green for forage, and consumed upon the farm.

The plants of the latter class, namely the leguminous, when mixed with gramineous plants, as the rye-grass, are commonly termed the artificial grasses, but would be more correctly termed the cultivated herbage or forage plants. They are often suffered partially to ripen their seeds, and are made into hay; and in this case they follow the general law, exhausting the soil more than when used green. And when the hay-crop is carried away from the farm, they are to be regarded as exhausting rather than restorative crops.

In speaking of these different classes of plants, the following terms may be employed:—

1. The cereal grasses may be termed Corn-crops.

2. The leguminous plants cultivated for their seeds, Pulse [and maize] crops.

3. The turnip, and other plants of the same kind, cultivated for their roots and leaves, may, with reference to the mode of consuming them, be termed Green crops; or, with reference to the manner of preparing the ground for them, Fallow-crops.

4. The potato, and plants of other families cultivated for their roots and tubers, may, in like manner, be termed Green or Fallow-crops.

5. The leguminous plants cultivated for green food, as the lucerne and tare, may be termed green forage-crops.

And, lastly, the mixture of gramineous and leguminous plants cultivated for herbage or green feed, may, in compliance with common language, be still termed the Sown or Artificial Grasses.

Further, distinguishing these different classes of crops according to their effects upon the fertility of the farm, they might be divided thus:

1. Corn-crops—exhausting crops, and favorers of weeds.

2. Pulse-crops—exhausting, but clean crops or capable of being rendered so.

3. Green or fallow-crops—restorative and cleaning crops.

4. Green forage-crops—restorative and sometimes cleaning crops.

5. The sown grasses—restorative crops.

Knowing these the general characters of the cultivated plants, we have, in devising a rotation, to cause the restorative and cleaning crops so to alternate with the exhausting crops, as that the land may be preserved fertile and clean. Further, when we find that land cannot be sufficiently cleaned by means of cleaning crops, we must make use of the summer-fallow; and again, when we find that land requires rest, we may lay it down to grass for a longer or shorter time, taking care when this is done that the land shall be in as fertile a state as circumstances will allow and free of weeds.

TREATMENT OF HOGS, AND PLAN OF FATTENING THEM.

Whatever may be thought of the late Mr. William Cobbett, as a man or politician, the character of being a good farmer, will be conceded to him by every one who may have read the productions of his herculean mind on the subject of husbandry, and believing from his success in raising hogs, that his views on that particular branch would not be uninteresting, we extract the following from his chapter on hogs:

It is seldom that the hogs come to a proper age before they are killed. A hog has not got his growth till he is full *two years old*. But, who will, or can, have the patience to see a hog eating *Long-Island swill* for two years? When a hog is only 15 or 16 months old, he will lay on two pounds of fat for every one pound that will, out of the same quantity of food, be laid on by an eight or ten month's pig. Is it not thus with every animal? A stout boy will be like a herring upon the very food that would make his father fat or kill him. However, this fact is too notorious to be insisted on.

Then, the young mutton is not so nutritious as the old: Steer beef is not so good as ox beef. Young wether mutton bears the same proportion in inferiority to old wether mutton. And what reason is there, that the principle should not hold good as to hog-meat? In Westphalia, where the fine hams are made, the hogs are never killed under *three years old*. In France, where I saw the fattest pork I ever saw, they keep their fattening hogs to the same age. In France and Germany, the people do not eat the hog, as hog; they use the hog to put fat into other sorts of meat. They make holes in beef, mutton, veal, turkeys and fowls, and with a tin tube, draw in bits of fat hog, which they call *lard*, and, as it is *all fat*, hence comes it that we call the inside fat of a hog, *lard*. Their beef and mutton and veal would be very poor stuff without the aid of the hog; but, with that aid, they make them all exceedingly good. Hence it is, that they are induced to keep their hogs till they have *quite done growing*; and though their sort of hogs is the *very worst* I ever saw, their hog meat was the *very fattest*. The common weight in Normandy and Brittany is *from six*

*Indian corn may be included in this class of plants.—Cultivator.

to eight hundred pounds. But, the poor fellows there do not slaughter away as the farmers do here, ten or a dozen hogs at a time, so that the sight makes one wonder whence are to come the mouths to eat the meat. In France *du lard* is a thing to *smell to*, not to *eat*. I like the eating far better than the smelling system; but when we are telling about farming for *gain* we ought to inquire how any given weight of meat can be obtained at the *cheapest rate*. A hog, in his third year, would on the American plan, suck half a dairy of Cows, perhaps; but, then mind, he would, upon a third part of the *fattening*, food, weigh down four Long-Island "shoats," the average weight of which is about *one hundred and fifty pounds*.

A hog, upon rich food, will be much bigger at the end of a year, than a hog upon good growing diet; but, he will not be bigger at the end of two years, and especially at the end of three years.

His size is not to be forced on, any more than that of a child, beyond a certain point.

For these reasons, if I were settled as a farmer I would let my hogs have time to come to their size. Some sorts come to it at an earlier period, and this is amongst the good qualities of my English hogs; but, to do the thing well, even they ought to have two years to grow in.

The reader will think, that I shall never cease, talking about hogs; but, I have now done, only I will add, that, in keeping hogs in a growing state, we must never forget their lodging! A few boards, flung carelessly over a couple of rails, and no litter beneath, is not the sort of bed for a hog. A place of suitable size, large rather than small, well sheltered on every side, covered with a roof that lets in no wet or snow. No opening, except a door way big enough for a hog to go in; and the floor constantly well bedded with leaves of trees, dry, or, which is the best thing, and what a hog deserves, *plenty of clean straw*. When I make up my hogs' lodging place for winter, I look well at it, and consider, whether, upon a pinch, I could, for once and away, make shift to lodge in it myself. If I shiver at the thought, the place is not good enough for my hogs. It is not in the nature of a hog to sleep in the cold. Look at them. You will see them, if they have the means, *cover themselves over* for the night. This is what is done by neither horse, cow, sheep, dog, nor cat. And this should admonish us to provide hogs, with warm and comfortable lodging. Their sagacity in providing against cold in the night, when they have it in their power to make such provision, is quite wonderful. You see them looking about for the warmest spot: then they go to work raking up the litter so as to break the wind off; and when they have done their best, they lie down. I had a sow that had some pigs running about with her in April last. There was a place open to her on each side of the barn. One faced the East and the other the West; and, I observed, that she sometimes took to one side and sometimes to the other. One evening her pigs had gone to bed on the East side. She was out eating till it began to grow dusk. I saw her go in to her pigs, and was surprised to see her come out again; and, therefore, looked a little to see what she was after. There was a high heap of dung in the front of the barn to

the south. She walked up to the top of it, raised her nose, turned it, very slowly, two or three times, from the north east to the north west, and back again, and at last, it settled at about south east, for a little bit. She then came back, and marched away very hastily to her pigs, roused them up in a great bustle, and away she tramped with them at her heels to the place on the west side of the barn. There was so little wind, that I could not tell which way it blew, till I took up some leaves, and tossed them into the air. I then found, that it came from the precise point which her nose had settled at. And thus was I convinced, that she had come out to ascertain which way the wind came, and finding it likely to make her young ones cold in the night, she had gone and called them up, though it was nearly dark, and taken them off to a more comfortable birth. Was this an *instinctive*, or was it a *reasoning* proceeding? At any rate, let us not treat such animals as if they were stocks, and stones.

[From the Philadelphia Sat. Evg. Courier.]

THE CATTLE OF WALES.

CONCLUDED.

THE GLAMORGANSHIRE Ox.—The interests of the grazier were first considered, and the comparative slowness in feeding in the present Glamorgans was attempted to be obviated by crossing with the Hereford bull. This to a considerable extent succeeded. An animal was produced well adapted for the grazier; disposed to accumulate flesh, and of a harder constitution: but the ox was a little injured for the yoke; the beef, as is the case with every animal that arrives at an early maturity, was not so fine; and the value of the cow was very much diminished; she was neither so good a milker, nor nurse. Besides this, the fattening of an animal that grew to so great a bulk as the mingled Hereford and Glamorgan, interfered too much with the present economy of Glamorganshire husbandry; and the produce of this cross did not always thrive on the scanty fare on which it was compelled to subsist.

That important, and not duly appreciated fact, to which we shall often have occasion to allude, was also here very apparent. The advantage of mingling the Hereford with the Glamorgan was evident enough in the first cross, and the farmer began to congratulate himself on the result; but after the second and third generation, the influence of the foreign blood rapidly disappeared, and the Glamorgan, with all his characteristic points and defects, again stood before us. The heavy Leicester was likewise tried, but the progeny became sluggish and unfit for labour, and slow in feeding and coarse in beef, and unfit for stocking such a district. The influence of soil and climate on the production, and the perpetuation of certain breeds, is a circumstance that does not enter half so much into the consideration of the farmer as it ought to do, and will account for a great many of his disappointments and erroneous opinions.

Breeders then began to take another view of the matter. They considered their cattle as mere machines for converting the raw produce of the earth into human food; and they inquired whether their soil and climate, and situation for markets, and their mode of agriculture were best adapted for a machine to produce beef, or milk.

The character and habits and employment of the inhabitants of Glamorgan had essentially changed. Mines had been sunk, and manufactories had been established in almost every part of the country. It was become a very populous district, in which dairy produce would always command a ready sale. In addition to this, the good old custom still prevailed in this country, of farm-servants being kept under their employer's roof; and their diet, in order to be both wholesome and economical, was chiefly derived from the dairy. As, therefore, the old Glamorgan could with so much difficulty, or scarcely at all be reproduced, the attention of the farmer was gradually directed to the dairy.

THE GLAMORGANSHIRE Cow.—At first he was unwilling quite to sacrifice the old pride and boast of his native country; and he endeavoured once more to accomplish both objects, and he had recourse to the short-horns. A very little experience, however, convinced him that his labour would here be lost. He retained, indeed, the milk, but he somewhat deteriorated its quality; and the beast was slow and sluggish, and not calculated for labour, and would not thrive on the pasture and on the nourishment which this country usually affords. In a happy hour he thought of the Ayrshire cow; and he brought her from her native district. Some farmers used her pure; others crossed her with the best Glamorgan cattle; and others with still more judgment procured the Ayrshire bull, and bred with him from the best of their own heifers. The result was, an animal that yielded more milk than the old Glamorgan—that was hardier, and could be kept, and especially in the winter, at much less expense, and that from its smaller size was more easily fattened, and better suited to the coarse fare now generally afforded her by the Glamorganshire farmer. This, then, is the breed which is becoming, and profitably so, established in the populous district of Glamorgan. Their beasts bear a close resemblance to the Herefords in figure, although inferior to them in size; they feed kindly—the flesh and fat are laid equally over them—the beef is beautifully marbled, and they yield a more than average quantity of milk. They are fattened to perfection at five years old, but not often at an earlier age; and will become sufficiently bulky on the good pastures of the vale without any artificial food. In the hilly districts many of the old Glamorgans remain, and attempts are made to restore the character of the pure Glamorgan cattle of fifty years ago, but without that degree of success which will fairly remunerate the farmer.

[From the Indiana Aurora.]

IMPROVED BREEDS.

A matter of great importance among farmers, but the value of which seems not to be duly appreciated, is the growing of the best breeds and varieties of live stock, [as indeed of every thing else,] in order to receive the best return for their labor and investment. An animal of the very best breed and quality, whether horse, cow, sheep or swine, will, it is true, cost you more than one of inferior quality and blood, perhaps twice, perhaps five times as much. And what then? why then all the difficulty is over, and they become a continual source of revenue to you ever after.

The raising of an inferior colt, or calf, or lamb,

or pig, will give you about the same labor and expense as one of the best blood and quality; but mark the contrast when you offer them for sale.

Your common colt, at, say three years old, may bring you from thirty to forty dollars, while your blooded colt, at the same age, will readily command seventy-five to one hundred dollars. Your *murly* calf at say six months old, will bring you two, three, or four dollars, while for your fine Durham calf, [or other improved breeds,] you may command thirty, fifty, or seventy-five dollars,* and so of the rest.

In view of the importance of this thing to the agricultural interests of this section of country, we would suggest to our spirited *young* agricultural society, the propriety of raising funds by subscription, for the purpose of procuring and introducing among us some of the better varieties of domestic animals, especially cattle. These can be had, of the most improved breeds and of pure blood, in several places in Kentucky and Ohio, within such distance as to render the expense of bringing them here inconsiderable—especially when compared with that of bringing them from Europe, which has been done by enterprising agriculturists of our country, and have thus brought them within our more convenient reach. We are satisfied, that the requisite sum, would readily be contributed by our enterprising farmers and others, were the proposition fairly brought before them. We have heard several persons express a disposition to contribute liberally to such an object, and we know not how a small sum could be better expended.

*Note by the editor of the Farmer & Gardener.

A gentleman from Washington county, of this state, informed us a few days since, that he sold the present season, a bull calf 4 days old, of the improved Durham Short-horn breed, for \$200.

FOREIGN ABSTRACT.

Advices from Europe to the 16th September have been received.

Parliament settled the difficulties between the two houses by the passing of the municipal corporation bill, with the amendments of the lords in a modified form, and were prorogued by the king in person on the 11th ultimo.

The cotton market was declining and unsettled.

The Irish tithe bill has passed.

The mobs in this country created much anxiety among the merchants in England, and it is added that unless accounts of a more favorable nature are shortly received, it is thought that it will tend materially to slacken the present disposition of commercial adventures with the U. States.

In France, the law passed by the legislative branches of the government, for the suppression of the liberty of the press, has received the sanction of the king and become a law. So ends the glories of the thrice glorious revolution!

Spain. The news from Spain is unfavorable to the cause of the Queen. Insurrections in favor of Don Carlos, had been, and were forming in all directions. A Junta had had been formed in Madrid, to which the Queen adhered, and the Cortes was to be called.

MARKETS. Liverpool, Sept. 14. The cotton market exceedingly depressed, and the prices of all descriptions giving way considerably. The bet-

ter qualities of American cottons fully 1-8d to 1½d lower, and the inferior scarcely saleable, at a reduction of 1½d per lb. Sea Islands 21½d to 23d. Mobiles and Tennessees 7½d to 12½d. Orleans 8 to 12½d.

MULBERRY TREES AND SEEDS.

100,000 Chinese Mulberry or Morus Multicaulis of various sizes and from \$25 to \$30 per 1000.

150,000 White Italian Mulberry at very low rates by the 1000 or larger quantity.

200 lbs. White Italian Mulberry seed.

Also the following superior large sized trees which now form a Mulberry orchard—but must be removed:

2000 Chinese Mulberry 3 years old 7½ to 8 feet high.

2000 do do 2 do 5½ to 6 do

2000 do do 3 do and budded on the

White Mulberry which have proved to be much more hardy than those from cuttings.

These 6000 trees are the greatest acquisition that any silk culturist can possibly obtain, and there is not another equally valuable collection for sale in the Union, as those who have such will not part with them.

50,000 cuttings of the Chinese mulberry at reasonable rates by the 1000, &c.

Fruit and Ornamental Trees of all kinds, Garden seeds, Bulbous roots, Green-house plants, and every other article promptly supplied and at very moderate prices.

Wm. PRINCE & SONS.

oct 20

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CHOICE DOUBLE LARK SPUR SEED.



The subscriber offers for sale, put up in packets of 12½ cts. each, the most beautiful *Delphinium Ajacis fl. Pleno*, ever flowered in this country. The seed was grown the present season, and this splendid flower is thus described by the experienced horticulturist of whom the seed was procured: "The trusses of flowers are above a foot in length, on a stately stem of near three feet, are as double as roses; in fact they more resemble Hyacinths, and combine every shade of color from the darkest purple to the most delicate lilac, and from the most beautiful pink to snowy white, with emerald green centres; but in order to have them of this rich description, it is necessary to sow the seed early in the month of October, as real gardeners know that spring sown seed will not flower half as well as that put down in the fall—it should be sown in a little bed by itself, of light rich soil, well pulverized with the spade and rake—on the approach of winter cover it with straw or brush as you would spinnage, which remove in the month of April, after which keep the ground loose and clean. Larkspurs should not be transplanted." A 12½ cent paper embraces all the varieties mixed together.

BULBOUS ROOTS.

A superior collection of BULBOUS ROOTS, consisting of Hyacinth and Tulip Roots of various sorts and colors, Narcissus, Ranunculus, Crocus, &c. Printed directions will be furnished.

Now receiving from our Seed Garden, Europe, &c. a full collection of GARDEN SEEDS, growth 1835, among which are many sorts fine Peas, Onion Seed, Parsnip, Carrot, Beet, Yellow Turnip, Radish, &c.

Also for sale—500 dozen POTATO ONIONS, a very mild Onion and immense product. They should be planted about the last of October.

R. SINCLAIR, Seedsman,
Light, 4 doors N. of Pratt st.

oc 13

GEESSE AND WHITE TURKIES.

FOR sale at Clairmont Nursery, a few pair of those very large WHITE WESTPHALIAN GEESSE, so much admired for their great size and fine flavor.

Also WHITE TURKIES from Holland. These are truly most beautiful birds, with plumage as white as that of geese, making one of the prettiest objects on the lawn.

All orders from a distance will be promptly filled. A lathe-box will be provided and food for a voyage to any part of the United States, furnished and delivered on board in Baltimore for \$5 a pair, for either Geese or Turkeys.

Printed prices and catalogues of Nursery articles will be forwarded to order, post paid.

Oct. 20. 4t.

ROBERT SINCLAIR.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,.....	bushel.	2 50	
CATTLE, on the hoof,.....	100lbs.	5 00	6 00
CORN, yellow,.....	bushel.		84
White,.....	"		84
COTTON, Virginia,.....	pound.	18½	
North Carolina,.....	"		
Upland,.....	"	18½	20
FEATHERS,.....	pound.	37	40
FLAXSEED,.....	bushel.	1 25	1 37½
FLOUR&MEAL—Best wh. wh't fam.	barrel.	7 25	7 75
Do. do. baker's,....	"	6 75	7 25
Do. do. Superfine,....	"	6 00	6 25
SuperHow. st. in good de'd	"	6 00	6 25
" wagon price,	"	5 75	5 87
City Mills, extra,.....	"	6 12	6 25
Do.	"	5 87	6 00
Susquehanna, firm&scarce	"	6 00	6 12
Rye,.....	"	4 50	4 62
Kiln-dried Meal, in hhds.	hhd.	19 00	20 00
do. in bbls.	bbl.	4 37½	4 50
GRASS SEEDS, red Clover,.....	bushel.	5 00	5 75
Timothy (herds of the north)	"	2 75	3 25
Orchard,.....	"	2 25	3 00
Tall meadow Oat,.....	"	2 00	2 50
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.		15 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,....	"	7	8
Hogs, on the hoof,.....	100lb.	7 00	7 50
Slaughtered,.....	"		
HOPS—first sort,.....	pound.	12½	
second,.....	"	10	
refuse,.....	"	8	
LIME,.....	bushel.	33	35
MUSTARD SEED, Domestic,.....	"	5 00	6 00
OATS,.....	"	32	34
PEAS, red eye,.....	bushel.		
Black eye,.....	"		1 25
Lady,.....	"		
PLASTER PARIS, in the stone,....	ton.		3 50
Ground,.....	barrel.	1 25	
PALMA CHRISTA BEAN,.....	bushel.	2 00	
RAGS,.....	pound.	3	4
RYE,.....	bushel.	75	78
Susquehanna,.....	"	none	
TOBACCO, crop, common,.....	100 lbs	4 25	5 00
" brown and red,....	"	5 25	6 50
" fine red,.....	"	6 00	7 50
" wrappery, suitable	"		
for segars,.....	"	10 00	16 00
" yellow and red,...	"	8 00	11 00
" good yellow,....	"	11 00	16 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"	4 00	
" ground leaf,...	"	5 00	8 00
Virginia,.....	"	5 00	10 00
Rappahannock,.....	"		
Kentucky,.....	"	8 00	14 00
WHEAT, white,.....	bushel.	1 27	1 30
Red,.....	"	1 07	1 23
WHISKEY, 1st pf. in bbls.....	gallon.	37	37½
" in hhds,....	"	33½	
" wagon price,	"	30	bbls.
WAGON FREIGHTS, to Pittsburgh,.	100 lbs	1 50	
To Wheeling,.	"	1 75	
WOOL, Prime & Saxon Fleeces,...	pound.	washed. unwash.	
62 to 75		32 to 34	
Full Merino,.....	"	52	62 30 32
Three fourths Merino,.....	"	47	52 28 30
One half do,.....	"	42	47 26 28
Common & one fourth Meri.	"	38	42 25 26
Pulled,.....	"	38	42 26 28

CONTENTS OF THIS NUMBER.

Notices—of the Silk Manual—of the Paper on the culture of the Peach—Proposition for a pattern Farm—Notice of Mr. Barnitz's Cattle—Fall Ploughing—Virtues of the Bene Plant—The blind Staggers and its Cure—Agricola on Peach Culture—Professor Low's elements of practical Agriculture—Cobbett on the treatment of Hogs—The Cattle of Wales—Improved and common Breeds of Cattle—Foreign Abstract—Advertisements, Prices Current, &c.



FRUIT AND ORNAMENTAL TREES, SHRUBS, &c.

ROBERT SINCLAIR, successor of Sinclair & Moore, in this department of the business of the firm, offers for sale at his **NURSERY**,* three miles east of the city of Baltimore, where the proprietor resides, and will be pleased to show customers his extensive assortment of Apples, Peaches, Plums, Cherries, Apricots, Pears, Quinces, Gooseberries, Catawba and other Grapes, Plants and Cuttings; also, Ornamental Trees and Shrubs, among which are the much admired *Morus Multicaulis*, and Italian White Mulberry for feeding Silk-worms and ornament; the Chinese Ailanthus, or Tree of Heaven, English Elm, Sugar and Silver leaved Maple, Horse Chesnut, Madeira Nut or English Walnut, silver leaved Poplar, Catalpa, European and American Linden, Balsam Fir, Weymouth or white Pine, European and American Larch Trees, Arborvitae, a large and splendid assortment of Hardy and Indian Roses, and Ornamental Shrubs, Plants, mostly of large size and very thrifty, occupying an extent of about 20 acres.

The questions having been repeatedly and seriously put to him by persons residing in Baltimore, whether he had any Peach or Apple Trees old enough to transplant, and believing, therefore, that if persons living within three miles of his nursery, were ignorant of these facts, that others more remotely situated might be expected to be equally uninformed, he has thought it would not be inopportune to make a statement of the number of some of the prominent articles on hand, and having counted the same, reports the following, among numerous other varieties, as ready for transplantation:

Grafted Apple Trees of all sizes,	21,120
Budded Peach do. of 1, 2 and 3 years old,	16,080
Balsam Fir, Silver Fir, or Balm of Gilead,	500
English Lime or Linden Trees, imported last winter, 4 to 6 feet high,	500
English Gooseberries, 20 of the best sorts and largest fruit,	500
English or Scotch Larch, 3 feet high,	500
<i>Morus Multicaulis</i> , or new Chinese Mulberry, so highly prized for feeding silk-worms, as also for ornament,	2,000
Yellow Locust Trees from 6 to 10 feet, best sort,	2,000
Catawba, Isabella, and other grapes plants—many three years old, and would bear next year if removed this fall,	2,000
Vines, Creepers, Asparagus, Rhubarb, (for tarts and pies,) Plants; hedging thorns, &c.	

All sold at low prices, as will appear by his catalogue just published, and to be had gratis of the proprietor, or at the Maryland Agricultural Repository of Robert Sinclair, junior—or they will be sent by mail if requested.

The proprietor would prefer that all orders intended for him should come to him *direct*, unless more convenient to the party, and then through R. Sinclair, junior, seedsmen, Light, near Pratt street, at the Maryland Agricultural Repository.

Every possible care will be observed by him towards every order with which he may be favoured, it being his intention to do every thing within his power to promote the interest and give satisfaction to his customers. All purchases made of him will be delivered in town, when desired, free of cartage.

All plants, trees, and other articles purchased of him, after delivery at the nursery, or as per order, are to be at the risk of purchasers, as it cannot be presumed, that, after he shall have faithfully executed his orders that can be held responsible for miscarriages and accidents over which he has no controul.

*The best way to go to the Nursery is out N. Gay st. taking the Bel-Air or new cut road, for about a mile, where there is an index board pointing in the proper direction, other indexes or sign boards further on, will indicate the right road.

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Printed by Sands & Neilson, N. E. corner of Charles and Market streets.

GREAT STOCK FAIR AND SALE.

THE proprietors of the *Farmer & Gardener*, Baltimore, will hold a **FAIR** for the sale of Stock of all kinds on **SATURDAY**, the 24th, and **MONDAY**, the 26th day of October, inst. at those commodious and eligible lots adjoining the Canton Race Course. They have been governed in their selection of this situation, by its convenient distance from the city, easy approach either by land or water, being distant from the heart of the city not more than two miles, and by the great convenience of transportation thither—there being a steamboat regularly running there from the city every hour in the day, from 10 o'clock, A. M. at the moderate charge of an elevenpence for each person.

The proprietors have already entered for sale at their Fair, the following valuable **ANIMALS**, viz.

BULLS.

No 1. The improved Durham short horned Bull *Leon*, bred by Wm. H. Freeman, Esqr. of Baltimore, Md.—Calved on the 8th of August, 1830, now in possession of S. Canby, of Woodside, Del.

Leon—is by Gloucester, dam *Flora*.
Gloucester—was imported in July 1826, by Mr. J. H. Powell, calved Feb. 28, 1825 (bred by J. Whitaker, Esq.: one of the most celebrated breeders in England) by Frederick, dam *Adela* (bred by Mr. Whitaker: gave with her first calf 24 quarts per day) by Orpheus; g. d. Alfred (bred by Mr. Hestler, gave 24 qts. per day) by Alfred, (200 guineas was refused for Alfred) g. g. d. by Windsor g. g. d. Old Daisy) bred by Mr. C. Collins, (gave 32 qts. daily) by Favourite, sire of Comet: g. g. g. d. by Punch; g. g. g. d. by Hubback.

Frederick—roan, (bred by Mr. Charge) got by Hulton, dam, Orbit, by Comet sold for 1000 guineas; g. d. Splendor by Comet; g. g. d. Flecked Twin by Major; g. g. d. Red Simmon by Favourite; g. g. g. d. Flecked Simmon by Bartle; g. g. g. d. Old Simmon, (bred by Mr. Charge) descended from the Studley White Bull.

Hulton—(Bred by Mr. Charge,) got by Newton, dam Meteor by Comet.

Newton—(bred by Mr. Charge,) got by Comet, dam Fanny by Mr. Charge's Grey Bull.

"Comet"—red and white roan, calved in 1804, (bred by Mr. Collings,) got by Favourite, dam young Phoenix, by Favourite; g. d. Phoenix, by Foljambe, &c. &c. (Comet was sold for 1000 guineas at Mr. Collings' sale Oct. 11th, 1810).

"Gloucester's" pedigree can be found more at large in a work called "Hints for American husbandmen, published by the Pennsylvania Agricultural Society," in 1827, he is also recorded in the English Herd Book.

"Flora"—(dam of *Leon*) was got by Sampson, dam Betty, g. d. Old Betty; Sampson by son of Ossian, d. by Comet; Ossian by Favourite; by Bolingbroke; d. Phoenix by Foljambe; g. d. by Alcock's Bull; gr. g. d. by Smith's Bull; gr. gr. g. d. by Jolly's Bull.

"Flora's" pedigree can also be found at large in the 'Memoirs of the Pennsylvania Agricultural Society for 1824,' and is likewise recorded in the English Herd Book.

J. H. Powell, Esq. considers *"Gloucester"* one of the finest Bulls ever imported by him. He was purchased by Mr. Freeman for 1200 Dollars.

No 2. *"Hector"*—dark red, calved Nov. 22, 1833, by Parson, dam Red Rose, gr. d. Prize by Denton, Parson (owned by H. A. Carpenter, Esq.) got by Bishop, dam Moss Rose (imported in 1821, bred by Mr. Asher) got by Phenomenon, &c.

No 3. *Major*—Red and white, calved Narch 8, 1824, by Duke, dam Fanny, (No. 4) by Parson; d. Isabella by Lothario.

No 4. *George*—Red and white, calved March 13, 1834, by Duke, d. Orphan by Lothario, gr. d. by Billy Austin.

No 5. *Uncas*—White, calved May 5, 1834, by Leon (No. 1) dam Prudence by Parson; gr. d. Patience; g. g. d. Stella; g. g. g. d. Star by Denton; Star gave 40 quarts of milk per day.

No 6. *Peter*—White, calved May 5, 1834, by Leon; dam Isabella by Lothario; d. Meg by Billy Austin.

No 7. *Rufus*—Roane, calved August 28, 1834; by Leon; d. *Flora* (No. 6) by Parson; gr. d. Meg by Billy Austin.

No 8. *Henry*—Red and white, calved March 1, 1835, by Leon, d. Clementina (No. 1) by Lothario; g. d. ta by Denton.

No 9. *Ned*—White and red, calved 12, 1835, by Leon, dam Fanny, (No. 4) by Parson; g. d. Roan by Lothario.

No 10. *Bob*—Roan, calved June 9, 1835, by Leon, dam

Kate (No. 5) by Parson; g. d. Chance by Lothario.

COWS.

No. 1. *Clementina*—dark red; by Lothario, d. Star, by Denton. Lothario was gotten in England by George; d. Moss Rose, (imported in 1821) by Phenomenon, &c.

No. 2. *Cora*—red and white; by Parson, d. Clementina, (No. 1.)

No. 3. *Hetty*—white and red; by Parson, d. Meg, by Billy Austin.

No. 4. *Fanny*—dark red; by Parson, d. Roan, by Lothario.

No. 5. *Kate*—brindle, by Parson, d. Chance, by Lothario.

No. 6. *Flora*—red; by Parson, d. Meg, by Billy Austin.

No. 7. *Laura*—red and white; by Parson, d. Gypsey, by Parson.

No. 8. *Lucy*—red and white, calved April 22d, 1834; by Leon; d. Helen, by the Hon. J. J. Milligan's Red Bull.

No. 9. *Caroline*—roan, calved July 18, 1835; by Leon; d. *Flora*, No. 6.

No. 10. *Sally*—roan, calved July 28, 1835; by Leon, d. *Laura*, (No. 7.)

The pedigrees of all of the above animals will be given in full to purchasers, well authenticated.

In addition to the above they will have for sale at the fair from 16 to 20,

FULL BLOODED DEVONS,

Warranted pure and of the best blood in the country. They respectfully solicit consignments from the owners of any of the following kinds of stock.

Improved *Durham Short Horns*—full blooded, and grades, whether imported or raised in this country.

DEVONS, do do do.

SUPERIOR OXEN,—well broken, whether improved imported or native kinds.

Superior MILCH COWS of native stock.

SHEEP—Improved Bakewell, Saxon, Merinoes—full blooded, and their respective grades.

Superior HORSES of all kinds.

MULES, JACKS and JFNNEYS.

Various breeds of HOGS, remarkable for size and taking on fat.

In every instance, where the stock to be sent, are of the imported full bloods, or of their respective grades, certificates of pedigree, well authenticated, must be sent, as it is the wish of the proprietors to make their FAIR a mart where the agriculturists of the country may resort with a certainty of getting genuine articles—just such animals as they may believe they are buying.

Should the proprietors of the *Farmer & Gardener* be met with that spirit of generous reciprocity, which they believe due to the present effort, it is their purpose to hold ANNUAL or SEMI ANNUAL FAIRS, believing that they will not only conduce to the immediate interests of farmers and those engaged in raising stock, but to the country at large; for they hold it to be a tenable position, that whatever tends to advance one great national branch of industry, is necessarily promotive of the whole. The convenience to the agricultural community, of such an establishment as a great mart to which they may resort with the certainty of selling any fine animals they may have to dispose of, or of procuring such as they may desire to purchase, will be obvious at the first blush.

Animals coming by water can be landed at the Canton Company's wharf, adjoining the Fair ground. Owners of animals will send their own keepers. Hay, grass, and such other feed as may be desired, can be procured on the premises at fair market prices. Or if owners should prefer, a per diem for livery will be charged.

Seven and a half per cent commission upon all sales will be charged, and for each animal offered for sale that may not be sold, the usual offering fee.

A careful person will be on the premises to take charge of the animals as they may arrive and allot them their respective places.

JOHN I. GROSS, Auct.

ADDITIONAL.

Also, from the herd of John Barney, Esq. one of the most celebrated breeders in the country, a few of his

FULL BLOODED

Improved short horn Durhams.

Among which are a cow and calf—the cow a superior animal both for the pal and as a reeder; a few choice DEVON COWS and CALVES. Besides these, some of his splendid BAKEWELL SHEEP.

Several SUPERIOR FIGS.

And from the *Epsom* herd, 3 fine young Bulls, a ewe between the Durham and Alderney.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 26.

BALTIMORE, MD. OCTOBER 27, 1835.

Vol. II

THIS publication is the *successor* of the late
AMERICAN FARMER.

and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, OCT. 27, 1835.

SILK MANUAL.

The proprietors of the *Farmer and Gardener*, Baltimore, have in the press, and will speedily publish, a complete *Manual of the Mulberry and Silk culture*, compiled from the best and most authentic sources. As the object is the promotion of a great public interest, the cost will be moderate.

INGERSOLL'S PIGGERY.

We republish, by request, an interesting description of the Piggery of Mr. Ingersoll of Brookline, Massachusetts, which originally appeared in the *American Farmer* in 1824. The details and products are no less astonishing than the economy of arrangement and systematic pursuit of his object are highly honorable to the intelligence and sagacity of Mr. Ingersoll. The farm of this gentleman, it will be perceived, is but twenty-one acres, and yet the proceeds of the sale of his hogs, fed altogether with its products, amount to \$2409 60, a sum greatly beyond the yield of many farmers of several hundred acres in extent. Why is this so? The reason is obvious enough: Mr. Ingersoll has the good sense to rise superior to the prejudices of by-gone days; to strike out a plan more congenial with the spirit of the age, and the present state of agricultural science, and the result is no less flattering to his pride than it is beneficial to his pecuniary interests—while he is getting rich upon the fruits of his little farm, its soil is maintained in a state of tilth equal to the production, in luxuriance, of any thing in the vegetable kingdom.

A MAMMOTH SQUASH.

A Mr. Stinson, in Portsmouth, New Hampshire, has raised a squash, the present season, weighing 116 pounds, and measuring $5\frac{1}{2}$ feet in circumference. This is, indeed, a huge and ponderous vegetable, and when we recollect that our esteemed old friend and valuable correspondent, *Abd-*

nego Robinson, Esq., is of that vicinage, we can but hope that a few of the seed of this giant may find their way southward, and should they reach us in their migration, it will give us pleasure so to distribute them as to do the greatest amount of good with them. Another account says that this aforesaid squash weighed 200 lbs.

By the way, this is fairly the year of *pumpkin* glory, for we had hardly indicted the above, before two of nearly as much magnitude and ponderosity caused us to ponder on their ponderous bodies. The one was raised by Peter Filbert, of Reading, Pa., and weighs 100 lbs., the other by George Rahn, Esq., of Orwigsburg, Pa., weighing 110 lbs. and measuring 5 feet 6 inches in circumference and two feet in diameter.

It is estimated by well informed persons that no less than 19,000,000,000 of silk worms die annually victims to the production of the amount of silk consumed in England, in one year. These worms according to the ratio of 3,000 to the pound of silk, which by the bye, is a safe one, make 6,333,333 $\frac{1}{3}$ lbs. of silk, which at \$4 per lb. would be \$25,333,442, and as England can never be a silk growing country, owing to the physical defects of her climate, the Silk culturists of our country have a fine opportunity of soon becoming competitors to supply the raw material.

MANAGEMENT OF MILCH COWS.

We were much astonished a few evenings since while conversing with a very intelligent gentleman, who owns a farm in this county, to hear him say that during the last winter his milch cows which were kept warm in the stable did not look as well as his dry cows and other cattle which were exposed in the barn yard under sheds, that merely protected them from the rain and snow. We were not surprised at the result of the two modes of keeping, for that was but the natural effect of the different relations of the animals; our surprise sprung from another quarter—from the declaration that our friend made, that the coming winter he would keep his milch-cows in the barn yard with the other cattle. The cow kind, we are aware, are warm blooded, hardy animals, and can bear great intensity of cold, so long as they are fed well with good strong nutritious food, and will take on fat tolerably kindly,

even when exposed to winter winds and frosts; but it is impossible to keep milch-cows to the pail, so as to yield even a tolerable supply of milk, unless they are kept warm, and fed generously with wholesome, nourishing food; for it is utterly impossible that those delicate vessels, or thoracic ducts, which secrete the milk can perform their office efficiently, while the poor animal is shivering with cold, exposed to the searching winds of a December day. The secretion of fat, may probably, go on unobstructed, or but partially so, under such exposure. The cause of our astonishment arose especially from this circumstance—that the good sense of our friend should not have enabled him to account for the superior appearance of the dry cattle over those that were giving milk. He should have recollected, that while the feed consumed by the former was solely required for the accumulation of fat, the poor milch-cows had to supply the *additional demand for chyle for milk*, and that what would keep the one fat, would not be more than sufficient to preserve a decent appearance in the other. This is the *rationale* of the phenomenon, if we may so term it. It was not because exposure to cold winds and pinching frosts suited the constitutional habitudes of his cattle better than a warm and comfortable birth in his stable, but that what they ate was solely required for purposes of obesity, whereas the food consumed by the milch-cows had to answer the two-fold demand of fat and milk. It is well known to every one in the least acquainted with animal economy, as indicated in the cow species, that a deep milker and a very fat cow, is but too seldom found in the same animal, at the same time, while on the contrary, deep milkers are uniformly more prominent in points than flesh. We hold it to be an indisputable proposition, that no cow will give a copious supply of milk through the winter, unless she is well and comfortably kept, and fed with succulent food.

PUMPKINS AS FOOD FOR HOGS.

We have recently heard several farmers say that their hogs did not *thrive* while fed on pumpkins; that they *scoured* them so much as to counteract all the good effects from whatever nourishment there might have been in them. It is very

probable that hogs fed altogether on *uncooked* pumpkins might be thus operated upon, as from the superabundance of vegetable acid, present in this vegetable, when fresh pulled, it is more than likely that any animals exclusively fed upon them *raw*, would be injuriously affected by them from the cause we have before assigned. This bad effect, however, might very easily be remedied by cooking them, and thus converting the *acid* into a *sweet*, identical with, in its qualities, if not itself, sugar. Nor is the correction of this tendency to act upon the stomach and other *viscera*, the only good to be gained by cooking this vegetable; for its nutritious properties are also so greatly enhanced, that we think it would not be claiming too much, to say that it would be thus *directly* improved fully to the amount of 25 per cent., besides rendering the food perfectly innoxious. If the *cooking* plan should be rejected, and the farmer should choose to feed the pumpkin in the same good old way as did his great, great, great-grand father, let him keep some charcoal in his hog-trough, and occasionally sprinkle his pumpkins with hickory ashes. Either of these simples would serve to neutralise the bad effects of the food, and to make the hogs take on fat kindly.

[From the Maine Farmer.]
SWEET BUTTER.

Mr. Holmes: Your paper has been a constant visitant at our house, since its commencement, and I have derived much very useful information from its columns. Many an hour has passed off agreeably, and very profitably too, after the children were in bed, and asleep, "and all around was low and still," in looking over the articles in it from time to time contained, on the dairy, and house-wifery. But after all the information you have been the medium of communicating, it appears by your paper, that you have just cause to complain of having eaten strong butter. If I resided in your vicinity, I should feel very much ashamed that such a cause of complaint should exist. And really I do feel ashamed for the wives of the farmers in your vicinity that they should remain so inattentive to the rules in your paper, as to still make poor butter when it is equally as easy to make good. I have butter in my house now, made last June, which is far richer in color, and pleasant in flavor, and as sweet as when taken out of the churn, and the whole process of making it I learnt from the Farmer, and will again state it for the information of your readers.

3lbs. of Pembroke salt, (rock salt ground.)
2 " Salt Petre.
1 " Loaf Sugar.

Pulverize and mix them well together, and after working the milk thoroughly from the butter incorporate 1 1-2 ounces of this mixture to every pound of butter. Set it in a cool place for one or two days, then work it over again until it is entirely free from buttermilk, and pack it close in stone jars or firkin as full as you wish to have it, melt some butter in a low temperature,

and pour over it to the thickness of about half or quarter of an inch—on this lay a linen cloth and cover lightly. It will come out in the winter of a bright gold color, and cut smoothly; and to many palates the flavor will be more agreeable, than when it comes from the churn. On one or two firkins, instead of laying the linen cloth I made a pickle with the above kind of salt and salt petre, with which I covered them, which answered as well. The loaf sugar adds much to the agreeable flavor of the butter, but it will grow rancid if the above named saltpetre is used in the proportions named without the sugar.

CURE FOR A CANCER.—Mr. Thomas Tyrell, of Missouri, advertised that a cancer upon his nose, which had been treated without success by Dr. Smith, of New Haven, and the ablest surgeons in the western country, had been cured in the following manner: He was recommended to use a strong potash, made of the ashes of red oak bark boiled down to the consistence of molasses, to cover the cancer with it, and in about an hour afterwards cover it with a plaster of tar, which must be removed after a few days, and if any protuberances remain in the wound apply more potash to them, and the plaster again, until they shall disappear, after which heal the wound with common salve. Cautery and the knife had been previously used in vain. This treatment effected a speedy and perfect cure.

Hooshier Oats—There is now in the office of this paper a stool of oats; it has 12 stalks and heads, one of the heads, which we selected as a fair average contains 270 grains, making in all 3240 grains. The stalks measure 12 inches in circumference, six feet and a half in height. They were raised by Mr. Garret Seymour, who is lately from the Old Dominion (Virginia) and however its soil is noted for the production of great men, he says the Hooshier State far outstrips it in the production of oats. We think few countries can equal this production; the increase is 3,240 fold. Mr. Seymour would without doubt, have taken the premium of our Agricultural society, but unfortunately the society was vetoed not long since.—*Indiana paper.*

Nourishment for Horses.—The practice is becoming general in Silesia, of feeding horses with bread. After an experience of four years, an intelligent husbandman is convinced of its utility in the relation of economy and health. The bread is made by taking equal quantities of oat-meal and rye-meal, mixing it with leaven or yeast, and adding one third of the quantity of boiled potatoes. To each horse is given 12 pounds per day, in three rations of 4 pounds each. The bread is cut into small pieces, and mixed with a little moistened cut straw. By this means he saves in feeding 7 horses, 49 bushels of oats in 24 days; while the horses perform their common labor, and are much better in looks, health, and disposition.—*New England Farmer.*

To preserve Celery through the Winter.—Get up the celery on a fine dry day, before it is injured by frost, cut off the leaves and roots, and lay it in a dry airy place for a few days; then remove

it to a cool cellar, where it will be quite secure from frost, and pack it up with sand, putting layers of celery and sand alternately.—*Loudon's Gar. Mag.*

Fall Ploughing.—Last Autumn I had three lots of danked meadow land about five acres in each, side by side, separated only by a six feet ditch, and to all appearance no difference in any respect, that I intended to have ploughed in the fall and planted with Indian corn in the spring. It so happened that only one of the lots was ploughed last fall, the remaining two this spring. Where the ground was ploughed last fall there is now growing a very vigorous and healthy crop of corn. The other two lots have been twice planted, and here and there, are growing a hill of corn, yellow, sickly in its appearance but almost destroyed by the cut worm. A. D.—*N. E. Farmer.*

MR. INGERSOLL'S PIGGERY.

"Honor and shame from no condition rise,
"Act well your part, there all the honor lies."

[We have the satisfaction to publish the following account of the most perfect system of breeding swine, that has fallen under our observation. We have visited the establishment which it describes, and there heard with pleasure, the explanations of its intelligent owner, upon the different parts of his plan. And from our desire to profit by his experience, we subsequently requested him to give us a written description of his Piggery, and the management thereof, which he promptly furnished, in a letter that invited us to pursue our inquiries, and these procured for us the more ample details contained in his second letter. It was our wish to publish these communications soon after they were received, but we could not obtain his express permission to make that use of them; therefore, we have withheld his letters from the press until the present moment, when we are assured that the cause of his reluctance has ceased to exist; and that his plan may now be made public, without any prejudice to his interests, or violation of his wishes. This system challenges our admiration, and we cheerfully render it to his head and heart. How few of us take equal care of superior animals! And there are not many who carry equal method into their most important avocations—errors, which may justly be ascribed to defective education. It is easy to perceive in every part of Mr. Ingersoll's proceeding, that confidence which merchants feel in the employment of capital at some risk, and heavy charges, for the production of a probable and fair, although remote profit, through a definite channel. With such hopes and calculations, education had made him familiar, whilst it gave him habits of critical investigation that must ever secure to their possessor eventual success in any occupation to which he may devote himself. As a farmer, we perceive that he has derived a handsome livelihood from the cultivation of a few acres of land, and the employment of a small capital, in connexion therewith; whilst there are many proprietors of princely estates, who can scarcely contrive to banish want from their domains. We have pointed to the chief cause of such painful deficiencies—it remains for parents to diminish their number in future times, by taking present

and suitable means to qualify their children to pursue their respective occupations with benefit to their families, and advantage to society. And whilst we are zealously laboring to amass property for our offspring, let us not be unmindful of their intellectual treasures, but remember always that the improvement of these can alone teach them how to enjoy and augment the wealth that we may give.]—*Edit. Am. Far.*

Brookline, Mass., Oct. 30th, 1821.

DEAR SIR—

I have, this evening, received your favor, dated 1st inst., inclosing some valuable seeds, and two numbers of your publication, for which I beg you to accept my acknowledgments. I should feel mortified that your interesting Journal should have been published near three years, without my availing myself of its information—the fact is, I have been a subscriber through our mutual friends, Messrs. Wells and Lilley, from the beginning.

I am happy to hear of the safe arrival of the pigs, and more gratified that you are pleased with them. It will give me great pleasure to send the boars you wish in the spring; and they shall, as you desire, be of different parentage from those you already have. I am fully satisfied, from repeated trials, that a fine race of animals cannot be kept up by breeding *in and in*; and I have, both in my sheep and swine, two distinct families, which are crossed with each other. And except to supply the number of each kind I want to breed from, the individuals of the same family are never allowed to come together. By attention and strict adherence to this plan of crossing, where both kinds are good, I have a fine healthy stock. The animals are improved, both in size and symmetry, and their disposition to get very fat, at an early age, has been increased. At twelve months old, the pigs you saw in my various pens, averaged 280 lbs.; and many of them exceeded 300 lbs. each. This weight, as they were fed almost entirely upon vegetables, was very satisfactory. A larger race has been often recommended to me by my neighbours. But a large race would not only require more food, but it must also be of much richer, and of more expensive quality. Boiled cabbages, turnips, and other vegetables, whose acreable produce is large, and which constitute the principal sustenance of my own breed, would make but poor returns when given to a larger framed animal.

My establishment consists of twelve breeding sows and two boars, that are kept as long as they bring fine litters of pigs—failing in this, they are fattened, and their places supplied by others of one year old, before they are put to the male. The sows are put with the boars the 1st of April, and the 1st of October, and farrow twice a year. Their inside pens are eight feet by five, and their outside pens are three by four feet. About the time they are expected to bring forth, the styes are littered with straw cut into chaff, very fine, that the little pigs may be dry and warm, without being entangled with long straw, and thus destroyed. The litters are always regulated, so as to leave not more than eight pigs to any one sow, either by changing their mothers, when necessary, soon after their birth, or by removing supernumeraries.

I have always found a family of eight pigs at a month old, worth more than one of twelve; their growth being so much greater. From each outside pen the pigs have access through a small hole, to a common yard, which is always kept well littered; in which they play—and where dry corn is placed in shallow troughs to induce them to eat as early as possible. Each party knows their mother, and they find their respective pens without difficulty. These pigs are *always* weaned the 1st of October, at six or eight weeks old, that the sows may be again in the way of their duty, and my system progress. From these pigs I select seventy-two, and dispose of the rest.—They are put into twelve pens, containing six each, and are fed with the best food my swill trough affords, six times per day, for the first month, and three times per day afterwards. The inside pens are six feet square, and the outside four feet by six, both planked, with a quick descent, for the dirt, &c., to be carried off. *Much, indeed*, every thing depends upon their sleeping dry and warm, and being well littered, and kept perfectly clean. In these pens they remain six months, or until October and April, when they are all transferred to the fattening pens, and their places supplied by the newly weaned pigs. The fattening pens are planked—there is a cellar under them, and each pig is allowed an area of about twelve square feet to live in; for these there are no outside pens. The fattening pens are cleaned out every morning, and fresh litter given. For three months the pigs in them are fed from the swill trough as store pigs; at the end of which time, say January and July, their fattening commences, which consists in adding, for each of them three quarts of cracked corn to their daily allowance of vegetables, for three months, when they are killed as near the 1st of October and the 1st of April as may be. Thus you will observe the 1st of October, and the 1st of April, are busy days in my Piggery, as the little pigs are then weaned, the sows again put to the boars, the fat hogs sold off, the store pigs removed to the fattening pens, and my system completed.

To feed this stock, consisting of

- 72 pigs from one to six months old, and
- 72 pigs from six to twelve months old, and
- 12 old sows, and
- 2 boars; in all

158 mouths—we boil a kettle of vegetables, containing six bushels, to which is added one bushel of cracked corn three times a day, and after putting this mass into the swill trough and mixing it intimately, we add as much water as will make 112 gallons, or of each bushel of vegetables and corn sixteen gallons. This swill is then distributed *sweet and warm* to the stock, morning, noon and night, with great regularity, in the following proportions, viz.

In October, November, and December—to each of 72 pigs, from one to three months old, one gallon; and to each of 72 pigs, from six to nine months old, three gallons.

In July, February and March—to each of 72 pigs, from three to six months old, two gallons; and to each of 72 pigs, from nine to twelve months old, 2 gallons, with 3 quarts of corn.

In April, May and June—to each of 72 pigs,

from six to nine months old, 3 gallons; and to each of 72 pigs, from 1 to 3 months old, 1 gallon.

In July, August and September—to each of 72 pigs, from 9 to 12 months old, 2 gallons; and to each of 72 pigs, from 3 to 6 months old, 2 gallons, with 3 quarts of corn.

8 galls.

8 galls.

And these eight gallons, divided by their terms, or four, shew that on an average, throughout the year, two gallons are required daily per head for the 144 pigs; or equal to 288 gallons; and to our twelve breeding sows, and two boars, we give per day, three gallons each, or equal to 42 gallons; making, altogether, an aggregate of 330 gallons; thus quite consuming our three messes of 112 gallons each. By the different ages of the pigs, as above combined, we have a constant and daily call for the same quantity of swill through the year, so that our business proceeds with perfect regularity.

Baltimore, Nov, 21st, 1835.

DEAR SIR—

Your detailed account of the management of your Piggery, has afforded me great pleasure and instruction. And your very obliging offer to send me a list of the vegetables raised for your monthly supply, tempts me, not only to ask for it, but for some other explanations which you likewise proffer. I am anxious to have a summary view of the total quantity of each and every kind of food used in your Piggery per annum—the cost of raising or purchasing the food—the extent of land on which it is, or might be raised—the labor of feeding and attendance at other times—the annual weight and value of the pork killed—the usual number and value of supernumerary pigs—the probable value of your farm, of the food consumed—and the quantity and quality of the manure saved or produced, as well as the cost of an equivalent in manure, if otherwise obtainable. I have, you see, some curiosity; but I persuade myself, that it cannot give one so systematic as yourself, any trouble to answer me on each of those points, and in a way to shew me by a glance of the eye, that it is better for you to convert your vegetables and corn into pork and manure, rather than buy manure and sell vegetables; whilst I shall, at the same time, be taught economy and method by your precept and example, which I will endeavor to observe, and imitate at my breeding establishment. I feel somewhat at a loss as to the manner of building my pens; and on the inclosed paper, you will see doubts exemplified in rough diagrams; your correction on these would particularly oblige me. It is my desire to build them in a long narrow shed; on one side of my barn yard: and to have at one end, cooking and vegetable apartments.

At your request, I am induced to ask whether it would not be better, that is to say, cheaper, to steam than to boil your vegetables? I have seen it stated in the explanations of Scotch implements, published by their Board of Agriculture, in the year 1814, that one person by a simple apparatus, may steam in an hour, food enough, say of potatoes, to feed 50 horses a day, at 32 lbs. for each

horse. And I had quite concluded to procure a boiler and steaming box from Scotland, on the strength of that statement.

I have been led to make some inquiries of you in this letter, from an attempt to push your proceedings to their results; as you will see by the enclosed estimates, which will best define the most of my inquiries.

Do you give the swill warm in summer as well as in winter? Do you spay your sow pigs, or put fattening sows to the boar, shortly previous to killing? Have you used the mangel wurtzel, and observed its comparative value or relish? I think highly of it, and wish that it may be fairly tried by every farmer in this country. In our climate it is more certain and productive than any other root. On this head I beg leave, however, to refer you, for my opinions, to No. 5, Vol. III, of the American Farmer, in the notes on Mr. Cooper's account of his several crops. And

I remain truly, Sir,

Your obliged and obedient servant,
JOHN S. SKINNER.

NATHANIEL INGERSOLL, Esq.

Estimate of Food, Fuel, Labor, &c., employed at Mr. Ingersoll's Piggery, per annum.

6 bushels of vegetables, roots, &c. 3 times per day=18 bushels per diem, for 365 days=6570 bushels per annum, which at 25 cents per bushel,	\$1542 50
1 bushel of corn 3 times a day added to the above for 365 days, equals	1095 bu.
13½ bushels or 3 quarts per day, given to each of 144 fattening hogs, for 3 months or 90 days	1215
Corn per annum 2310 a 50cts.	1155 00
Fuel 1½ cords per month, sawing, &c. 18 cords,	100 00
Labor 1 man and 1 boy, wages and board	250 00
Yearly value bestowed on Piggery, Dr. Cr. by Pork and Pigs sold.	\$3147 59
142 hogs a 280lbs. 39,760lbs. a 6 cts.	\$2385 60
24 pigs, one by each sow, at each farrow, over and above 9 suckled, \$1	24 00
	2409 60
	\$737 90

Shewing a difference lost by using the food in the piggery, instead of marketing it; provided the corn and vegetables are valued at a price at which they could be marketed free of expense, and also return manure enough to keep up the fertility of the soil, which I presume might be done near this city, if not near Boston.

And if this is practicable near Boston would not the sale of vegetables and purchase of manure, be attended with less care than the piggery, and be more certain? At what price is the manure of stables to be had at Boston, say per load, of given cubic feet, when unrotted? And do your owners of market farms, who have been successful and long established, buy manure, and at what rate?

An elucidation of my attempt to estimate your operations, will give me the marketable value of your vegetables at home and in Boston, as well as an idea of the expense of converting them into money by direct sale, all which will be very acceptable and useful to me personally, if you can find time conveniently to furnish it.

Estimate of Land and Labor, required for the Piggery, &c. &c.

For 2310 bushels corn for piggery, a 40 bushels per acre,	68 acres.
For 6600 bushels vegetables, 500 bushels per acre,	14 acres.
Acres for piggery,	72
For the farm purposes to support 2 horses, and 2 oxen, say grain and grass,	16 acres.
Pasturing, orchards, lots, &c.	12 acres.

Acres, 100

Labor required to cultivate 100 acres as above, say 2 hands, 12 months wages and board,	\$300 00
For additional labor, spring, summer and fall, supposed to be equal to the expense of 6 hands for 6 months, or 3 hands for a year,	450 00
Annual labor, say	\$750 00

A farm of 100 acres of first rate character, might be worth \$100 per acre, 10,000 00 And the increase of value, attributable to augmenting population, would be more than equivalent to the wear and tear of utensils and stock employed.

The interest might therefore be considered as rent,	\$600 00
Add for taxes,	25 00
And for labor as above,	750 00
	1375 00

Then the farmer for his time may be considered as earning on a permanent scale, over and above interest, on his capital, by his piggery, for his own support, provided the manure keeps up the fertility of his soil, about

1034 60

*\$2409 60

Brookline, Dec. 24th, 1835.

DEAR SIR—

I received your favour of the 21st ulto., a long time after its date, and not until it was much worn and chafed with its travels ere it reached me. I will endeavour to answer your enquiries in detail. The following is a "summary view of the total quantity of each kind of food used in my piggery per annum," and the months in which they are used; beginning with the 1st of July, which is about the time I begin to depend upon summer vegetables, viz :

July and August—Mangel wurtzel, roots and tops being the thinnings from 2 squares each, containing 32 rods,	800 bush.
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*See sales of Pork and Pigs.

Summer squashes,	200
Early cabbages,	100
September, October and November—Winter squashes or pumpkins,	700
Large drum head cabbages,	800
Trimnings of mangel wurtzel, turnips, &c. &c.	150
December, January February, March, and April—Mangel wurtzel,† (roots)	200
Carrots,	900
Ruta бага,	200
Cabbages,	1500
May—Parsnips which were left in the ground during the winter, and allowed to grow in the spring, until their tops are from 4 to 6 inches high, when they are daily dug as wanted, and all boiled,	500
June—Potatoes,	250
Early lettuce, peas, chopped up vines and pods when the peas are full grown, though still green,	250
	Bushels, 6550

We always mix the vegetables by boiling some of either kind in each kettle.

My farming, or rather gardening, goes upon the principle of cultivating but little ground, and by great attention to get large crops, and in some instances two from the same land. The farm of one piece constantly in cultivation is an oblong, thus divided with an alley or walk 4 feet wide in the centre.

No. 1. Of the upper side was sowed this year, with mangel wurtzel, thinned out several times as described in a former letter, and finally cabbage plants set out two feet apart, (for a winter crop,) taken from square No. 3, of the lower side.

No. 2. Has now a crop of parsnips left to grow the next spring, to furnish food for the month of May. The frost, however severe, does not injure them, and they are very much liked by the hogs. The advantage of preserving without trouble through the winter makes them valuable.

No. 3. Upper side, produced parsnips that were dug in the month of May, and the 4th of June was sowed with carrots. Produce 237 bushels of the short kind.

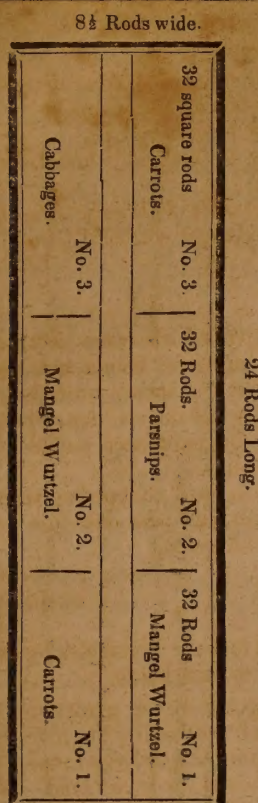
No. 1. Of the lower side was cropped with carrots this year; of the long orange kind. Produce 248 bushels.

No. 2. Bore the crop of mangel wurtzel I described to you in a former letter.

No. 3. Cabbages.—The ground was laid out in 8 beds, 4 rods long, and 1 wide; the 12th June, it was sowed with Pomfret cabbage seed, in rows 2 feet asunder. They were thinned out, as plants were wanted to set in other places, so as finally to stand 2 feet apart. Produce 500 bushels.

This piece of land is constantly cropped in such routine, that the same vegetable occupies the same square once in three years. Each square is annually manured with well rotted hog dung, and always at the rate of 4 cart loads for 40 cubic feet. The cabbage square has in addition 20 bushels of unslacked wood ashes.

† Cabbages and mangel wurtzel used first.



The aggregate produce this year of the whole 6 squares, or 1 1-5 acres was as follows, viz :

Upper Side.

No. 1. Mangel wurtzel tops and roots all boiled together,	510 bush.
Cabbages transplanted,	500 do.
	1010 bush.
No. 2. Now filled with parsnips—no doubt,	500 do.
No. 3. Carrots,	237 do.

Lower Side.

No. 1. Carrots,	248 do.
No. 2. Mangel wurtzel,	523 do.
No. 3. Pomfret cabbages,	500 do.
	Bushels, 3028

Upon the borders of this garden ground, which is one rod wide, I have a row of fruit trees. Under them we have lettuce, early cabbages, ruta бага for transplanting, and such vegetables as our family require. But upon the plat above described nothing grows to shade the crops devoted to the piggery.

A second piece of garden ground, contains a square acre, and is divided into 4 equal parts and cropped in this manner, viz :

¼ acre, early potatoes and peas for family use. Of the peas, those not wanted, are chopped up, vines and all, and boiled in June. This land is cleared soon enough for a crop of transplanted swedish turnips, or ruta бага.

¼ acre, summer squash. Produce 200 bushels.
¼ acre, carrots. Produce this year, 310 do.
¼ acre, cabbages. do do 560 do.

These two pieces of land are my sheet anchor—they are always highly cultivated and neatly dressed, without a weed allowed to seed upon them. I annually cultivate besides, 3 acres of field

land by breaking up 1½ acres, and laying down the same quantity. These 3 acres are cropped as follows, viz :

1 acre Potatoes,	250 to 300 bushels
1 acre Winter squash or pumpkins,	700 to 900 bushels.
½ acre cabbages,	1000 bushels
¼ acre mangel wurtzel,	250 { Roots, tops, &c. given to sheep and cows.
¼ acre carrots,	250 bushels
	2500 bushels.

These crops are an average for the last 3 years. My whole farm, (if it deserves that name,) is only 21 acres, within a ring fence. Of which one acre or more is occupied by buildings, yards, and approaches to them.

To carry on all my operations I keep two hired men through the year, one of whom however, does the duty of house servant at the same time; and I hire besides day labourers and cattle to plough, to amount of 150 dollars more. It occupies about the whole time of one man, to take care of my stock, consisting of 160 hogs, 60 sheep, 1 chaise horse, 1 cart horse, and one cow; though they are both engaged together, and when the animals are fed, are employed in the gardens in summer, and in winter getting out manure for the next season.

In answer to your question respecting the "probable marketable value of the vegetables on my farm," I would observe that the kinds and quantities of many which I raise, could not be sold at all; as for instance, the mangel wurtzel, ruta бага and all the tops and thinnings of others. Mr. Quincy tells me, he this year sells carrots in Boston, after carrying them 8 miles, at 9 dollars per ton, or 18 cents per bushel. Cabbages are sold by the load at 2 cents each, or about 8 or 10 cents per bushel. Parsnips and winter squashes must be retailed, and pumpkins in any quantity, would not sell for any thing.

To answer your question about market gardeners, I have endeavored to recollect, who among my neighbours have been successful and long established in that line, and I cannot select a single individual who has not driven his own cart to market, until he had sons old enough to take his place, and thus by attending to the minutiae of the business prevented that fraud and deception, that a gentleman farmer cannot easily avoid. When I first bought my estate, I sat up a market cart, got a stout horse, and a man well recommended, but my daily receipts kept growing less and less; my man and horse were out late every evening, and after a vexatious and mortifying experiment, I was convinced, that I must either find a market for my vegetables upon the place, and under my own eye, or give it up as a losing concern—for I could not bring my mind to the constant and daily competition, for trifling sums, which a man habituated to it from infancy, rather takes pleasure in.

Manure bought in Boston, costs them two dollars per buck load, of 62 or 63 cubic feet, trod hard and moderately heaped, in its unrotted state. The expense of carting put at the lowest rate, cannot cost the farmer less than \$1 50 per load, and when they bring it on hire, they charge \$2 50. My whole stock annually furnishes three hundred such loads, which after using all I want, find a

ready sale among the market gardeners in my neighborhood at 3 dollars per load, they taking it away with their own teams.

This manure is without any mixture of pond mud, sods, &c., which, had I access to such materials, might be very profitably increased.

As it respects steaming, instead of boiling vegetables, the only expense saved is fuel, for the same labor is necessary in filling and discharging them. Our labouring people require to have their work simplified as much as possible, and their judgment not often called into exercise. Were I to tell my man to steam 18 bushels of vegetables, and to give one-third of them 3 times a day to the stock, the consequence would be, that a much greater quantity would be given at one time, than another, and though the whole would be consumed in the course of the day, still the inequality of feeding would be hurtful. Besides in winter, particularly the swill, must be very warm, which could not be at night with vegetables steamed in the morning. Upon the whole therefore, I prefer to say to him, "fill the kettle with vegetables, and after they are boiled away sufficiently to make room, put in one bushel of cracked corn and oats, and give the whole for breakfast," thus making out the exact line of duty, and leaving nothing to his discretion.

I give the swill warm in summer, and almost hot in winter, and always sweet and fresh. In conversation with Dr. Derby, he argued upon the propriety of feeding with sour food, and that cold. I have formerly tried it, and satisfied myself it was wrong. Pigs may be habituated to eat it, but place his cold sour stuff in a trough, and a good smoking hot breakfast of mine in another beside it, and I will venture to say, they will soon show a preference.

I never spay sows, because *we have no one who knows the mode*, which is to be regretted. They are sometimes admitted to the boar a few weeks before killing.

In your's received yesterday, through Wells, and Lilley, you ask my opinion of the Byfield breed of hogs. As breeders they are the worst I know. The sows have small litters and destroy them oftentimes by laying down without any care. They are long coarse haired animals and very apt to be mangy, nevertheless to mix with almost any other breed, a Byfield boar is valuable, being a quiet race and disposed to get fat at an early age.

The Bedford is a hardier kind, and make good nurses. But for our uses have too much lean meat in proportion to their fat—their hams from that circumstance are excellent—a cross between a Byfield boar, and a Bedford sow furnishes a profitable and handsome stock.

Inclosed is a sketch of my piggery. I thought it might assist you in determining the mode of building your's—I find mine convenient, and know not, that I could alter it advantageously.

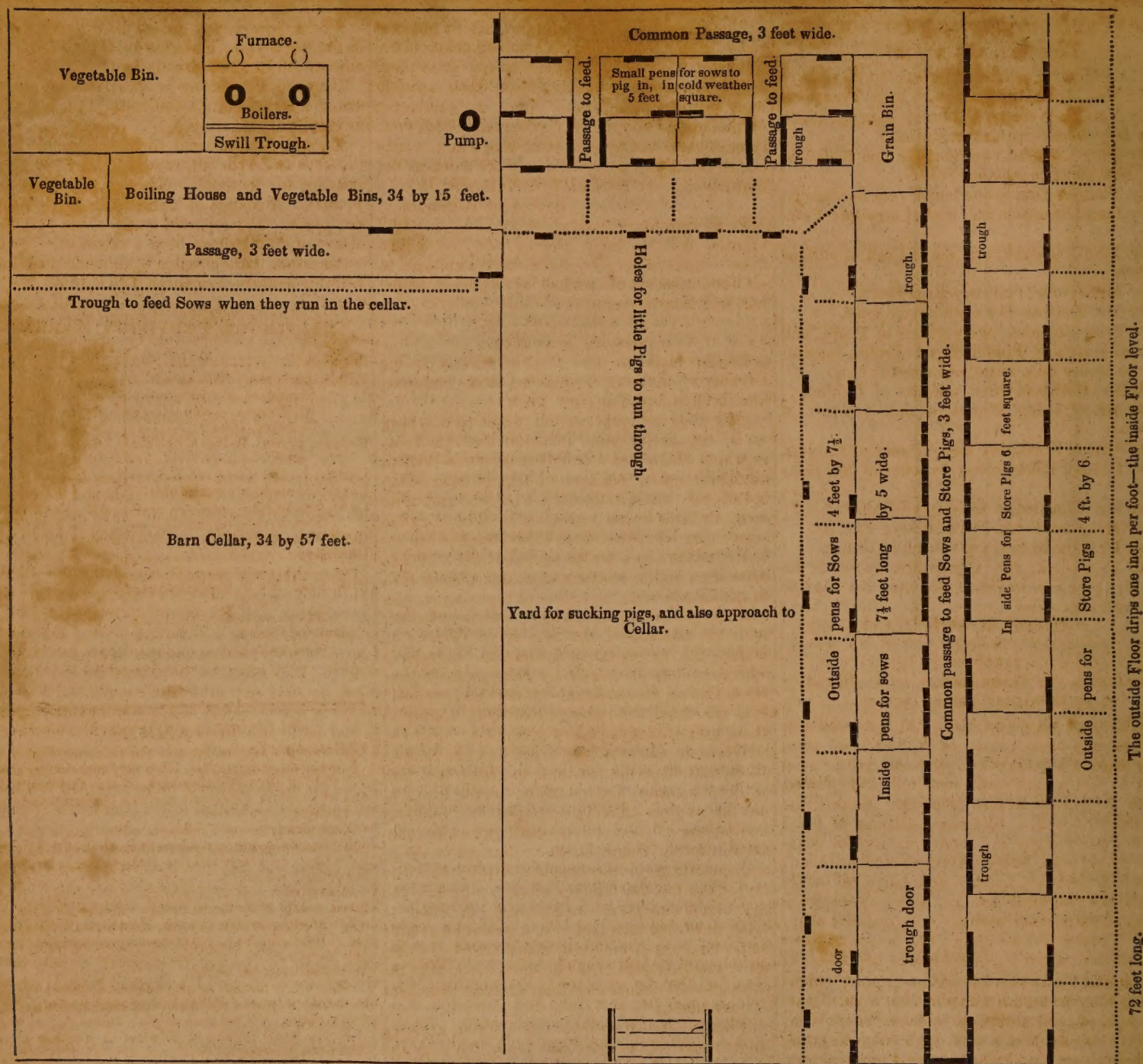
I have thus, my dear sir, attempted to give a comprehensive answer to your interrogatories; if there is yet any thing not perfectly clear to you I shall be happy to explain.

My letter has run on to a great length, but your politeness I trust will excuse it.

Your obedient humble servant,

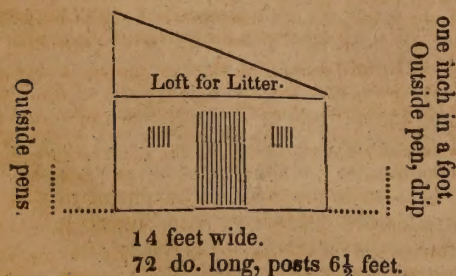
NATHANIEL INGERSOLL.

J. S. SKINNER, Esq.



I have attempted to proportion the building upon a scale of 10 feet to an inch.

[Gate.]



I have found it necessary to have communication with all the pens, from the principal *inside* passage for the facility of moving the sows and

store pigs, because outside doors are apt to be frozen down in winter. The spaces at the ends of the troughs, are therefore sliding doors, as all others are. The 4 pens near the boiling house, are made tight with covers, for sows to farrow, in very severe weather. The hogs are all fed from the common passage under cover. They eat more comfortably, and the troughs are never filled up with rain or snow. The outside pens of the sows, when they have pigs, are cleaned into a cart, and the manure carried away, that the yard for sucking pigs, may always be clean—and where they will soon learn to eat whole corn, if

placed in shallow troughs. They have holes sufficiently large for them to run out of.

Since you were here, I have been obliged to new lay the floor of my piggery, and have now arranged the pens conformable to the above sketch. I have also dug a well in the boiling house, and have the nose of the pump placed high enough to carry water into the kettles.—Should my spring fail, I shall by spouts, conduct the water that falls in rain upon the building, into the well. My fattening hogs you will recollect are fed upon the barn floor, and cleaned into the cellar, where the sows run before they pig.

MARYLAND HORTICULTURAL SOCIETY.

SATURDAY, Oct. 17, 1835.

The following articles were exhibited, viz:

By Mrs. John Lester, twelve large Tomatoes.
By Mrs. E. Webster, Baltimore County, three very large black Spanish Radishes.

By Peter Coombs, two bunches fine Radishes, and two bunches superior Salsify.

By Thomas Dixon, one bunch very fine Salsify.

By James Stronach, half bushel very fine Potatoes.

By John Vanwyck, one ear of Corn of curious growth.

By Mrs. Grove, two very large Pears.

By Mr. Dunbar, five very large apples.

By Peter Coombs, two varieties of Pears, and a small braech of Pommed'apui Apples, containing 14 apples on a space eight inches long.

By Mr. Harrison, three varieties of Dahlias.

By Mr. Zebulon Waters, a fine bouquet of Dahlias.

By Samuel Feast, fifty fine varieties of Dahlias.

By Edward Kurtz, seven varieties of fine Dahlias.

By Mr. Valentine, 4 varieties of Dahlias.

By Mr. John Feast, 27 varieties of Dahlias.

By Dr. Edmonston, five splendid Dahlias.

At 12 o'clock, the Committee awarded the weekly premium to Peter Coombs, for his fine fruit and vegetables.

GIDEON B. SMITH, Cor. Sec'y.

DIRECTIONS

For planting the Gama Grass seed, cultivating the grass, and curing the hay.

In the first place you must put your seed into a vessel, add to an ounce of it, 2 gills of soot, pour thereon a quart of boiling water, let the seed soak 48 hours, then drain and roll it in plaster, when it will be fit for planting. Manure the ground well with a compost consisting of equal parts of ashes, loam and stable manure, or vegetable mould from the woods, marsh mud and lime; plough it in well, harrow and pulverize finely, then make your drills one inch deep, 18 inches apart, and plant your seed the same distance asunder. They will come up in a few weeks, say two or three, and when up, they must be kept clean of weeds, and the earth stirred two or three times during the season. If you plant but a small portion of seed, and desire to enlarge your stock of grass through that means, don't cut your grass, let it go to seed, and when the seed are ripening, you must be careful to go into your patch every morning and pick them off the stalks, as they only ripen one or two at a time, and unless carefully watched will drop off and be lost.

Early in the spring of the 2d year, subdivide and transplant, and so each year until you have sufficient ground set out. Each plant will make ten or twelve offsets the first year, and twice that number the succeeding one.

If planted as soon as the frost is out of the ground, it will be fit to cut the first year by the 1st of June; succeeding years from two to four weeks sooner, and will bear cutting every 30 days for hay, and every 15 days for soiling. It has yielded 300,000 lbs. of green grass to the acre.

After each cutting, the earth should be stirred, and receive a slight top dressing of leached ashes.

The grass cut in the morning may be put into stack in the afternoon; in stacking, take, alternately, a layer of oats, wheat or rye straw, and then a layer of the Gama Grass, then sprinkle with salt, &c. until your stack is complete: by this means you not only effectually cure your Gama Grass, but convert your straw into a substance equally as acceptable to your stock as the best hay.

ROBERT SINCLAIR, Jr.

Seedsman, Baltimore.

P. S. An ounce of seed, which contains 260 kernels, will by being planted and subdivided three seasons in succession, enable the culturist to set out a meadow of upwards of 53½ acres, which will last him 70 years.

FOREIGN ABSTRACT.

London dates to the 17th, and Paris to the Evening of the 19th September, both inclusive, have been received at New York.

Spain.—Intelligence is thus received of a very severe engagement near Bilboa, on the 11th Sept., in which the queen's troops with their English auxiliaries were defeated with great loss, which is variously stated at from 1000 to 1800 and 2000 men, in killed and wounded. The English army is stated to have been 6000 strong—one account states that a British general and 500 soldiers were taken prisoners, and immediately shot, in conformity with the orders of Don Carlos, who commanded in person, who fights under a banner with the likeness of the *Mother of God* on it, which he, by royal proclamation, announces "the most holy *Virgin de los Dolores*, having me [Don Carlos] Generalissimo of my [his] troops." It is the fixed determination of Don Carlos to shoot every foreigner taken in arms.

While the forces of the queen and her English allies, have been thus doomed to defeat, the spirit of licentiousness and rebellion, is rife throughout the empire—making war upon the religious institutions of the country—consigning the monasteries to the flames and their inmates to death, and sometimes to the flames also—vociferously crying out for the sacrifice of the ministers and the establishment of institutions calculated to bring down the monarchy to a government little better than one of the most odious anarchy, where the excited feelings of the moment are to take the place of well defined and long existing principles of government.

France.—But little from this quarter, except a vague rumor of the determination of the king and his ministers to insist upon an "explanation" from our government before paying us the instalments of the indemnity due. We hardly think that credit should be attached to it, resting we understand altogether upon report. If the Citizen King is serious in his determination, we should think his *fatuity* arises from his own peculiar relations at home; having brought France to that volcanic verge, when to save his crown, he must give direction to the bad energies of his own subjects, and, therefore, seeks a pretext for a quarrel with us. As to "explanation" more than has been already given in the President's Message, we trust in Heaven he never will receive. We meddle not in politics, either privately or publicly, but between our government and another, we go for our country, right or wrong, even to the death.

The tribute money raised for O'Connell within the last 5 years amounts to £80,000 sterling, amount of the fund now on hand is £13,446.

Paganini, the fiddler is dead, leaving as it is stated, a fortune of \$1,400,000. This is fiddling to some purpose truly.

Later.—London and Liverpool papers up to the 26th and 27th ult. received. O'Connell was agitating in Scotland. Nothing important from France. A change of ministry in Spain has taken place. The reported battle of the 11th Sept. turns out only to have been a skirmish.

American cotton sales were made in Havre, 18th September—Louisiana 130 a 160f.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured.....	pound.	11	11½
Shoulders,.... do.....	"	10	—
Middlings,.... do.....	"	10	—
Assorted, country,.....	"	9	9½
BUTTER, printed, in lbs. & half lbs.	"	18½	25
Roll,.....	"	—	—
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old....	each.	3 00	6 00
Cows, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 87	2 00
CHOP RYE,.....	"	1 62½	1 75
EGGS,.....	dozen.	—	—
FISH, Shad, No. 1, Susquehanna,.....	barrel.	7 75	—
" No. 2,.....	"	6 75	—
Herrings, salted, No. 1,.....	"	4 25	—
Mackerel, No. 3,.....	"	4 50	—
Cod, salted,.....	cwt.	2 25	2 75
LARD,.....	pound.	10	10

TO FARMERS.

THE subscriber has for sale the following choice animals and articles, viz: Two very superior Jacks, one 13½ and the other 14 hands high, of the very best blood, and of first rate characters as quick performers and sure foal getters.

Four Jennetts—two upwards of 13 hands high, and equal in all respects to the best in the United States, both in foal by a very large and fine Jack; the other two young, but equally promising.

Also a few pairs of pigs of the "Philadelphia White" breed, nearly ready for shipping. This breed of hogs for quick growth, easiness to keep, and above all, for symmetry of form, challenge comparison with any other variety yet introduced to the notice of farmers in this country. Price 12½ cents per pound.

Also a few bushels of the celebrated *Short (or shot) winter wheat*, which will be sold in small quantities at 25 cents a quart, 150 per peck or \$5 a bushel.

Also a small invoice of Skinless or huskless Oats of American growth (believed to be the most valuable variety yet introduced among us). Price 50 cents a quart, or \$3 per peck.

Address I. I. HITCHCOCK,
No. 5 South Fifth street, Philadelphia.

I. I. H. will select from the best sources in and near Philadelphia, and forward to any part of the United States, as ordered, all kinds of Live stock, grass, and garden seeds, agricultural implements and books, trees, plants, and all other commodities in the farming and gardening line.
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CONTENTS OF THIS NUMBER.

Notices—of the silk manual—of Ingersoll's piggery—of mammoth squashes—number of silk worms raised to supply England with raw silk—pumpkins as food for hogs—how to make sweet butter—Hoosier oats—Bread good for horses—to preserve celery—fall ploughing—Interesting account of Mr. Ingersoll's piggery—Maryland Horticultural society's proceedings—directions for planting the gama grass—Foreign Abstract—Prices Current, &c.—Advertisements.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,	bushel.	2 50	—
CATTLE, on the hoof,	100lbs.	5 00	6 00
CORN, yellow,	bushel.	new 60to62	—
White,	do	do 60to62	—
COTTON, Virginia,	pound.	18½	—
North Carolina,	—	—	—
Upland,	—	18½	20
FEATHERS,	pound.	37	40
FLAXSEED,	bushel.	1 25	1 37½
FLOUR & MEAL—Best wh. wh't fam.	barrel.	7 00	—
Do. do. baker's,	—	6 00	6 12
Do. do. Superfine,	—	6 00	6 25
SuperHow. st. in good de'd	—	6 00	6 25
" wagon price,	—	6 00	6 12
City Mills, extra,	—	6 12	6 25
Do.	—	5 87	6 00
Susquehanna, firm & scarce	—	6 00	6 12
Rye,	—	4 50	4 62
Kiln-dried Meal, in hhd.	hhd.	19 00	20 00
do. in bbls.	bbl.	4 37½	4 50
GRASS SEEDS, red Clover,	bushel.	5 00	5 75
Timothy (herds of the north)	—	2 75	3 25
Orchard,	—	2 25	3 00
Tall meadow Oat,	—	2 00	2 50
Herds, or red top,	—	1 00	1 25
HAY, in bulk,	ton.	—	15 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	—	7	8
HOGS, on the hoof,	100lb.	7 00	7 50
Slaughtered,	—	—	—
HOPS—first sort,	pound.	12½	—
second,	—	10	—
refuse,	—	8	—
LIME,	bushel.	33	35
MUSTARD SEED, Domestic,	—	5 00	6 00
OATS,	—	32	34
PEAS, red eye,	bushel.	—	—
Black eye,	—	—	1 25
Lady,	—	—	—
PLASTER PARIS, in the stone,	ton.	—	3 50
Ground,	barrel.	1 25	—
PALMA CHRISTA BEAN,	bushel.	2 00	—
RAGS,	pound.	3	4
RYE,	bushel.	75	78
Susquehanna,	—	none	—
TOBACCO, crop, common,	100 lbs	4 25	5 00
" brown and red,	—	5 25	6 50
" fine red,	—	6 00	7 50
" wrappry, suitable	—	—	—
for segars,	—	10 00	16 00
" yellow and red,	—	8 00	11 00
" good yellow,	—	11 00	16 00
" fine yellow,	—	12 00	16 00
Seconds, as in quality,	—	4 00	—
" ground leaf,	—	5 00	8 00
Virginia,	—	5 00	10 00
Rappahannock,	—	—	—
Kentucky,	—	8 00	14 00
WHEAT, white,	bushel.	1 27	1 30
Red,	—	1 07	1 25
WHISKEY, 1st pf. in bbls.	gallon.	37	37½
" in hhd.,	—	33½	—
" wagon price,	—	30	bbls.
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 50	—
To Wheeling,	—	1 75	—
Wool, Prime & Saxon Fleeces, ..	pound.	62to75	32to34
Full Merino,	—	62	62 30 32
Three fourths Merino,	—	47	52 28 30
One half do.	—	42	47 26 28
Common & one fourth Meri.	—	38	42 25 25
Pulled,	—	38	42 26 28

Wagon price best bakers' Flour 5 75a 87.

No change in Wool—in good demand at quotations.

VALUABLE STOCK FOR SALE.

A FULL-BRED Durham short horn yearling BULL, a very superior animal; a 7-8 blood, same age; also two COWS, 4 years old, 3-4 blood, in calf by a full-bred Bull. Pedigrees given in full. Applications for any of the above cattle to be made to the Editor of the Farmer and Gardener, by whom the terms will be made known.

Letters from a distance must be post paid.
June 30th.



FRUIT AND ORNAMENTAL TREES, SHRUBS, &c.

ROBERT SINCLAIR, successor of Sinclair & Moore, in this department of the business of the firm, offers for sale at his NURSERY,* three miles east of the city of Baltimore, where the proprietor resides, and will be pleased to show customers his extensive assortment of Apples, Peaches, Plums, Cherries, Apricots, Pears, Quinces, Gooseberries, Catawba and other Grapes, Plants and Cuttings; also, Ornamental Trees and Shrubs, among which are the much admired *Morus Multicaulis*, and Italian White Mulberry for feeding Silk-worms and ornament; the Chinese Ailanthus, or Tree of Heaven, English Elm, Sugar and Silver leaved Maple, Horse Chesnut, Madeira Nut or English Walnut, silver leaved Poplar, Catalpa, European and American Linden, Balsam Fir, Weymouth or white Pine, European and American Larch Trees, Arborvitae, a large and splendid assortment of Hardy and Indian Roses, and Ornamental Shrubs, Plants, mostly of large size and very thrifty, occupying an extent of about 20 acres.

The questions having been repeatedly and seriously put to him by persons residing in Baltimore, whether he had any Peach or Apple Trees old enough to transplant, and believing, therefore, that if persons living within three miles of his nursery, were ignorant of these facts, that others more remotely situated might be expected to be equally uninformed, he has thought it would not be inopportune to make a statement of the number of some of the prominent articles on hand, and having counted the same, reports the following, among numerous other varieties, as ready for transplantation:

Grafted Apple Trees of all sizes,	21,120
Budded Peach do. of 1, 2 and 3 years old,	16,080
Balsam Fir, Silver Fir, or Balm of Gilead,	500
English Lime or Linden Trees, imported last winter, 4 to 6 feet high,	500
English Gooseberries, 20 of the best sorts and largest fruit,	500
English or Scotch Larch, 3 feet high,	500
<i>Morus Multicaulis</i> , or new Chinese Mulberry, so highly prized for feeding silk-worms, as also for ornament,	2,000
Yellow Locust Trees from 6 to 10 feet, best sort,	2,000
Catawba, Isabella, and other grapes plants—many three years old, and would bear next year if removed this fall,	2,000
Vines, Creepers, Asparagus, Rhubarb, (for tarts and pies), Plants; hedging thorns, &c.	—

All sold at low prices, as will appear by his catalogue just published, and to be had gratis of the proprietor, or at the Maryland Agricultural Repository of Robert Sinclair, junior—or they will be sent by mail if requested.

The proprietor would prefer that all orders intended for him should come to him direct, unless more convenient to the party, and then through R. Sinclair, junior, seedsman, Light, near Pratt street, at the Maryland Agricultural Repository.

Every possible care will be observed by him towards every order with which he may be favoured, it being his intention to do every thing within his power to promote the interest and give satisfaction to his customers. All purchases made of him will be delivered in town, when desired, free of cartage.

All plants, trees, and other articles purchased of him, after delivery at the nursery, or as per order, are to be at the risk of purchasers, as it cannot be presumed, that, after he shall have faithfully executed his orders that he can be held responsible for miscarriages and accidents over which he has no controul.

*The best way to go to the Nursery is out N. Gay st. taking the Bel-Air or new cut road, for about a mile, where there is an index board pointing in the proper direction, other indexes or sign boards further on, will indicate the right road.

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Printed by Sands & Neilson, N. E. corner of Charles and Market streets.

MULBERRY TREES AND SEEDS.

100,000 Chinese Mulberry or *Morus Multicaulis* of various sizes and from \$25 to \$30 per 1000.

150,000 White Italian Mulberry at very low rates by the 1000 or larger quantity.

200 lbs. White Italian Mulberry seed.

Also the following superior large sized trees which now form a Mulberry orchard—but must be removed:

2000 Chinese Mulberry 3 years old 7½ to 8 feet high.	2	do	5½ to 6 do
2000 do do	2	do	5½ to 6 do
2000 do do	3	do	and budded on the

White Mulberry which have proved to be much more hardy than those from cuttings.

These 6000 trees are the greatest acquisition that any silk culturist can possibly obtain, and there is not another equally valuable collection for sale in the Union, as those who have such will not part with them.

50,000 cuttings of the Chinese mulberry at reasonable rates by the 1000, &c.

Fruit and Ornamental Trees of all kinds, Garden seeds, Bulbous roots, Green-house plants, and every other article promptly supplied and at very moderate prices.

Wm. PRINCE & SONS.

oct 20

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CHOICE DOUBLE LARK SPUR SEED.



The subscriber offers for sale, put up in packets of 12½ cts. each, the most beautiful *Delphinium Ajacis fl. Pleno*, ever flowered in this country. The seed was grown the present season, and this splendid flower is thus described by the experienced horticulturist of whom the seed was procured: "The

trusses of flowers are above a foot in length, on a stately stem of near three feet, are as double as roses; in fact they more resemble Hyacinths, and combine every shade of color from the darkest purple to the most delicate lilac, and from the most beautiful pink to snowy white, with emerald green centres; but in order to have them of this rich description, it is necessary to sow the seed early in the month of October, as real gardeners know that spring sown seed will not flower half as well as that put down in the fall—it should be sown in a little bed by itself, of light rich soil, well pulverized with the spade and rake—on the approach of winter cover it with straw or brush as you would spinnage, which remove in the month of April, after which keep the ground loose and clean. Larkspurs should not be transplanted." A 12½ cent paper embraces all the varieties mixed together.

BULBOUS ROOTS.

A superior collection of BULBOUS ROOTS, consisting of Hyacinth and Tulip Roots of various sorts and colors, Narcissus, Ranunculus, Crocus, &c. Printed directions will be furnished.

Now receiving from our Seed Garden, Europe, &c. a full collection of GARDEN SEEDS, growth 1835, among which are many sorts fine Peas, Onion Seed, Parsnip, Carrot, Beet, Yellow Turnip, Radish, &c.

Also for sale—500 dozen POTATO ONIONS, a very mild Onion and immense product. They should be planted about the last of October.

R. SINCLAIR, Seedsman,
Light, 4 doors N. of Pratt st.

oc 13

GEESSE AND WHITE TURKEYS.

FOR sale at Clairmont Nursery, a few pair of those very large WHITE WESTPHALIAN GEESSE, so much admired for their great size and fine flavor.

Also WHITE TURKEYS from Holland. These are truly most beautiful birds, with plumage as white as that of geese, making one of the prettiest objects on the lawn.

All orders from a distance will be promptly filled. A lathe-box will be provided, and food for a voyage to any part of the United States, furnished, and delivered on board in Baltimore for \$5 a pair, for either Geese or Turkeys.

Printed prices and catalogues of Nursery articles will be forwarded to order, post paid.

Oct. 20. 4t.

ROBERT SINCLAIR.

RUFFIN ON CALCAREOUS MANURES, SECOND EDITION, just received at this office.

ALSO,

A few pounds of the celebrated SKINLESS OATS, price 50 cents per lb. said to produce 80 bushels per acre.

R. SINCLAIR, jr. Seedsman,
connected with this office

oc 13 2t

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 27.

BALTIMORE, MD. NOVEMBER 3, 1835.

Vol. II

THIS publication is the *successor* of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, NOV. 3, 1835.

SILK MANUAL.

The proprietors of the *Farmer and Gardener*, Baltimore, have in the press, and will speedily publish, a complete *Manual of the Mulberry and Silk culture*, compiled from the best and most authentic sources. As the object is the promotion of a great public interest, the cost will be moderate.

A LARGE POTATO.

We were presented some days since, by Mr. James Biays, of this city, with a potato of the pink-eye variety, weighing 2 lbs., and measuring 17 inches lengthwise, in circumference, and 14 crosswise. It was grown by Mr. Errandt, of Washington county, Md., and is one of the most perfect large potatoes we ever recollect to have seen.

How profitably might our farmers employ a few acres in such roots, to feed their stock with through the winter! We do not presume that Mr. E. had any considerable portion of his crop of the size of this one; but if the average were but one-third as large, the acre would yield from five hundred to seven hundred bushels, and in what we would ask, could an acre be cultivated, except in Mulberry, to the same advantage?

Brotherton, Oct. 28th, 1835.

Mr. Robert Sinclair, Jr.

Sir—Will you inform me through the medium of the *Farmer*, whether the common white mulberry, which grows indigenous on the Bay shore, will answer for feeding silk worms, and if fed on them will the silk be as saleable as that produced from the imported Italian mulberry raised from seed, or the new *Morus Multicaulis*, and if there be any difference, how much does it vary?—Your compliance will greatly oblige,

Your obt. serv't.

HENRY W. WOODWARD.

In reply to the above inquiries we remark, that it is impossible for us to tell what is the peculiar variety of the "White Mulberry growing on the bay shore," but if it be the White Italian Mulber-

ry introduced into this state by the proprietary government, before the revolution, we would say, that it will answer every purpose of the Italian Mulberry raised from seed, because it is the same variety of the Mulberry. Trees of it are to be found in all the counties bordering on the Chesapeake and its tributaries: and as to its comparative value with the *Morus Multicaulis*, the only difference would arise from this circumstance:—The leaf of the latter is large and without coarse fibres, and therefore can all be eaten, whereas the white Italian Mulberry, bears a leaf much smaller, with about the proportion of one-third which cannot, from its woody substance, be consumed by the worm; thus making a difference of 33½ per cent. in favor of the *Morus Multicaulis*, a very heavy profit of itself. With respect to the intrinsic excellence of the stuffs made from each, we presume they would be about equal.

It gives us pleasure to see those inquiries coming from old Anne Arundel—her soil is most happily adapted to the culture, and nothing could impart more undissembled pleasure to our heart, than to see her farmers and planters entering spiritedly into the silk culture, as we believe, in all sincerity, it would be infinitely more valuable to them than mines of gold and silver.—*The Editor of the Farmer & Gardener.*

CULTIVATION OF CORN.

We take time by the fore-lock, to suggest to our subscribers and other readers, the propriety of saving all their ashes, through the present fall, ensuing winter, and spring, from the weather, with a view of manuring their corn in the hill the next season. The effect of a half pint or pint of ashes upon a hill of corn, must be seen to receive credence; but we feel certain that we hazard nothing in saying, that the yield of an acre thus stimulated to vegetable luxuriance, will yield thirty-three and a third per cent. more than one which is not, though both may be in equal tilth at the onset. We do not pretend to comprehend the *modus operandi*, or specific action of ashes, in promoting vegetable growth, whether it be by meliorating the superincumbent *materiel*, and converting it into a pabulous substance peculiarly adapted to the purposes of vegetable food, or whether it acts more directly, and merely as a stimulant; but of its effect, from long and close obser-

vation, we are enabled to speak with certainty.—It is, beyond all comparison, the most efficient manure for *present* purposes, that can be used in the cultivation of almost any crop. And we would venture this opinion—that corn manured with unleached ashes in the hill, would be less annoyed by the cut worm, than that to which other manure had been applied. We recur to this subject thus early, because we desire that some of our public spirited and intelligent farmers, should prepare themselves to make such experiments as may silence all cavilling upon the subject.

LIME.

As farmers are now engaged in ploughing up their ground for winter fallow, to receive the meliorating influence of the frosts and snows, would it not be well to turn in a coat of lime with the vegetable lay. By so doing, it appears to us they would, the ensuing season, receive all the benefit from the lime, which is usually derived from it the second year. The peculiar virtue of lime consists, in part, in accelerating the process of vegetable decomposition, and thus within a given time, increasing the quantity of carbonic acid evolved, and in correcting any superabundance of vegetable acid which may abound, and so far as these benefits may be derivable from the application of lime, corn planted in fields next spring, manured this fall with lime ploughed in, would receive every advantage which usually appertains to crops the second year.

FIRE BLIGHT IN PEAR TREES.

This manifests itself by the limb or branch affected, suddenly withering and the leaves turning black, while the rest of the tree remains healthy. In order to arrest it, and prevent it from extending to the rest of the tree, the diseased branch should be, immediately, when discovered, cut off some distance below all indications of disease, and burned without delay. Trees already dead with fire blight should be removed altogether, and be destroyed in the same way. Where this course has been constantly and promptly pursued, it has been found completely successful. But where neglected, it soon extends through the orchard, and the whole are ultimately destroyed. As the season is now approaching when it makes its appearance, cultivators of this fruit should be on the look out, so as to arrest it at its very commencement.

Genesee Farmer.

THE LATE CATTLE FAIR AND SALE.

Our fair and sale of cattle and other stock is over, and while we have nothing to reproach ourselves with, we regret on account of those who favored us with their patronage, that there was not that spirit of enterprise present in the company, which was large and respectable both days, that we had hoped to have seen manifested. We were aware from the beginning, that, as it was but an *experiment*, it would be an uphill work; but on the other hand, we conscientiously and honestly believed, that *annual or semi-annual fairs and sales*, were imperatively required by the best interests of the agricultural community; that without some such institution, to arouse them from the lethargy which seemed to predominate in this quarter of our country, no adequate inducement would long exist, for public spirited gentlemen to incur the expense of importing animals from Europe, with the view of improving our native stocks. We knew too, that in getting up our fair, we should incur great expense, and have to assume heavy pecuniary responsibilities, which we might never have reimbursed; but with all this gloomy prospective, which broke upon our view in every direction—with the almost positive certainty of loss staring us in the face, the considerations to which we have before alluded—the belief that the thing was required by the farming interest, and the hope that we should be met by those, for whose benefit it was mainly intended, in a spirit of “generous reciprocity,” urged us forward to the accomplishment of our purpose, determined that if we should not crown our labors with success, we would at least deserve it. Thus influenced, we held our fair, and succeeded in getting together a very good collection of Cattle, from various herds; some extraordinary fine sheep—several remarkably fine Saxony rams—Bakewells of two families—and one three year old Leicestershire Bakewell, an *imported Ram*, of exquisite form, and most ponderous weight.—Indeed all the Bakewells were good—but “this was the noblest Roman of them all”—and notwithstanding a novice might have known he was the “true prince by instinct,” his *limit*, which by the way was moderate, was so *annoying*, that his owner could obtain no purchaser, and was compelled to carry him back again.

Delaware, upon this occasion, sent forth her legions, not of armed hosts to battle in the deadly strife, but of noble animals to bespeak the luxuriance of her fields, and the enterprise of her sons.

Mr. Samuel Canby, of Woodside, near Wilmington, brought 19 fine animals, *full blooded Improved Short-horn Durhams*, and various

grades. They were accompanied by the sire of most of the younger members of the herd, a most noble and beautiful creature, as white as the snow, cleanly built, with depth of shoulders and breadth of chest, that might compare with Hercules, and a hide with a covering more like satin than hair.—By his side stood several of his sons, one of them, Uncas, the very picture, the reflected likeness of himself—all, all testifying as far as dumb witnesses could, that they sprung from loins ennobled alike in blood and by deeds of gallantry. His bulls of various ages were eight in number, and of females, from the milch-cow to the calf, there were ten. All of them good animals, and some of them superior as breeders and for the pail.—They were as they had come from their native pastures—nothing artificial about them—all were grass-fed—*no stall forcing*, and they were just from off a travel of between 70 and 80 miles; but then the gentlemen who affected to be *judges* averred they were not as *sleek* as they might have been—they had come prepared to see a herd of noble creatures, which they expected to find like brainless Dandies, with ruffle shirts, and crimped collars, unsoiled and un-rumpled, and they had found them “fine animals to be sure; but then”—but what? Why to find fault is the province of lack-wits, and then it passes in a crowd for consummate judgment and profound learning: and if you happen to attract a mass of the uninitiated, around you, and have coned over the technicals of the trade sufficient to talk to *points*, you are sure to be taken for Solon, who, we all know, was a most profound lawgiver, the very patron of the idle and the dissolute—who achieved the inglorious triumph, of bringing down the prudent and provident rich to a level with the reckless and prodigal poor. Mr. Canby sold but five animals, four cows and a fine young bull, but one of which brought any thing like a remunerating price. After offering his cattle, on both days, he submitted *Mark Anthony* to the hammer of the auctioneer—a most noble stallion of the blood of Old Sir Archie and Florizel:—but even that splendid horse, with all his gallant bearing—raised as he was by John Randolph, of Roanoke, out of his favorite *Roanoka*, could not attract a bidder, and the high strained and generous courser, as he performed his circle in the centre of the *gathering* by which he was surrounded, seemed scornfully to hold his arched crest aloft, and to tread the earth more in “sorrow than in anger” that the days of chivalry were among the things that had been. But all would not do. The proud lineage of *Mark Anthony*, his perfect and symmetrical form, fine size and action, the classic associations which his

name calls up—the reminiscences which rush upon the mind at the very sound of the name of *Mark Anthony*—of that high-souled and dauntless Roman, whose deeds in arms were only equalled by the *weakness* which led him a willing captive to the footstool of the Egyptian queen—the Attic wit and withering satire of his ancient master—were all incompetent to stir the company up to a sense of his value.

Mr. Barney was however more fortunate in selling the animals he brought. With the exception of the Berkshire boar, which brought twelve dollars, a sum greatly below his value, every thing of the hog-kind that he had, went off at excellent prices, even to the little Curly Russian.—His Bakewell Rams and Ewes, of his own raising, were excellent of their-kind, and commanded, with a few exceptions, good prices: the best ram brought \$50, and the next best \$40, and so on.

His cows and heifers were all sold, and at prices which satisfied him. Amongst his cows, he had a full blooded Improved Short-horn Durham, which brought \$80: she was in calf by a bull of fine strain, and within three weeks of calving.—But independently of her *pedigree*, she was, herself a great milker, and showed, in perfection, every point that rendered her a valuable acquisition to the dairy. But then we heard *judges* (self appointed) decry her, because she “was not round and fat;” “because her hips were too broad,” as if these were not the very points indicative of deep milking. Out upon such judges! who ever saw a round bodied cow, prone to take on *fat*, that ever poured forth generous libations from her udder to the pail?

Mr. Caton had several beautiful sheep, Bakewells, Southdowns, and crosses with the Barbary, as also, some noble *Devons*, on the ground; but as he was not disposed to *sacrifice* them, they were not sold, and were returned again to Brookland meadows. Among them there were three three-year old bulls—Alexander, Tippoo Saib, and another, whose cognomen we do not recollect.—Three more beautiful animals were scarcely ever congregated together—their looks and carriage were majestic, and their walk so graceful and so light—so full of muscular energy—so elastic and so active. Besides these, there were a Devon cow and heifer, and a two-year old bull; and a four-year old bull, a cross out of a Devon cow by a Durham bull, a most splendid animal, as all admitted. Amongst this fine lot, there was not one that would not have made good beef, although they were grass-fed only.

Mr. Chew, of Epsom, had three bulls, crosses between the Short-horn Durham and the Alder-

ney, they were as their lineage would indicate medium sized animals, in good condition, and of comely appearance: but buyers were not to be found.

Mr. *Birnie*, of Frederick county, Md., had a very large and fine looking bull of the *Short-horn Durham* breed, begot in England and calved in this country, together with several Saxony Rams, each and all with their vouchers to verify their legitimate claims to pre-eminence; but as Mr. *Birnie* had come resolved not to sacrifice his property, he sold none.

Mr. *Thomas Oliver* had a beautiful *Short-horn Durham* bull, and a Devon cow, both of which were sold.

Mr. *Lloyd N. Rogers* had a pair of very fine young Mules, the one raised by himself, the other a Kentuckian, but his limit proved a *poser*, and the mules returned to their master's farm.

There were several horses offered, but few sold: and three *Jacks* were on the ground, ready to take advantage of circumstances; but their master thinking, wisely, perhaps, that the odds were against the probability of their selling, as *wisely* concluded it was most discreet not to *hazard* the *offering fee*, so that his gain was our loss, and the *Jacks* were marched off in dumb majesty, without even throwing temptation in the way of the *keen and eager bidders*.

Our senior partner had some pretty white turkeys and large Bremen Geese, and some Cattle at the fair, but as he was his own chapman, we cannot say what luck he had, except that he sold a half blooded Devon bull at a price which satisfied his moderate desires.

Captain *Dungan* had two Devon bulls, a heifer and two Devon cows, which, after being marshalled before lots of admirers, were returned to *Surry Farm*, to rusticate during the winter, under the auspices of their liege lord, who knows so well how to treat both man and beast. The old bull was rising 9 years old, and although in the "seer and yellow leaf," is full of dignity, and seemed proud of his high breeding. The younger bull was a two-year old, of fine promise, and the ladies of the family, did full credit to their keeping.

There were also a stud of blood horses at, though not of, the fair: some of these were sold, but at what prices we neither learned nor inquired,—they being poachers on the manor.

We have thus hastily run through the roll from memory; for we write without memoranda, and if we have omitted any thing, it is because our memory, like many friends, have proved treacherous when loyalty was most needed.

Admiration accompanies respect; hatred, fear.

"NOTES BY THE WAY."

We find in the October number of the *New York Farmer*, an interesting communication, under this head, from the Rev. *Henry Colman*. It consists of "Notes by the Way," made during a recent excursion up the Connecticut Valley and across the interior of New Hampshire, from which we make the following selections:

FEED FOR CATTLE, &c.

FLAX SEED.—My own experiments have fully satisfied me of the great advantage of the seed, given either in a boiled or raw state, for the fattening of neat cattle and sheep, but I am not able to determine its relative value. The use of oil meal for this purpose is universally approved by those well skilled in these matters. I have not found any particular advantage from its use in fattening swine; and persons, who have more extensively tried it for this object, have complained of its giving an unpleasant taste to the meat.

RYE MEAL.—It is applied by many persons with great success to the feeding of swine and cattle. Some farmers in my neighborhood, to whom I recommended the last year to make as accurate observation as they could of its effects when applied in a mixed form to the feeding of neat cattle, speak of it in the most favorable terms. The *Shakers*, in Canterbury, N. H. speak very highly of it to mix with Indian meal, half and half, for their swine, and say they should prefer to give a quarter of a dollar more per bushel for rye to use in this way, than to use clear Indian meal. They are, in general, in all these matters exact observers, and may be regarded in all matters of agricultural and domestic economy, as the highest authority. An intelligent farmer in *Maidshire*, holds it in the same estimation for feeding swine; and Gov. Lincoln, of Worcester, Mass., as good a farmer as he has proved himself to be wise and patriotic and just as a magistrate, has informed me of his use of it for fattening swine with great success.

The dairy farmers in *Cheshire, Mass.*, who, in the excellence and amount of their products, are perhaps surpassed by none in the country, are accustomed to give rye meal to their cows in the spring, as they believe, to great advantage. They have their cows come in, if possible, in March, begin to make cheese by the first of April. From this time, until the pastures afford a full bite of grass, they give to each of their cows about four quarts of rye meal once a day. Indian meal, they believe, has a tendency, when given in considerable quantities, to dry the cow, but rye meal greatly promotes the secretion of milk. Their experience is of great value; for nothing can exceed the neat and admirable management of some of the cheese dairies which I have visited in this place. The practice of the *Flemish* farmers is, likewise, to give their milch cows daily a "white drink," which is rye meal mixed with water.

POTATOES are principally used for the fattening of swine and stall feeding of beef. In the former case they are always cooked, in the latter they are given in a raw state; a yoke of oxen consuming two, three, four, and sometimes even five bushels a day. The profit of applying them in this way is doubtful, as may be easily seen upon reflection. Cattle fed in this way will not require a great amount of hay; but the calculation in

such cases is not very easy, so much depends on the condition of the cattle and their value when put up, their thrift, and the state of the markets, when they are ready to be disposed of. Beef made from potatoes has a peculiar sweetness and "juiciness," but it is thought that the animals fall away more in driving to market than those which are fattened upon Indian meal. This, after all, may be merely conjecture. The nominal value of potatoes is from 13 to 20 cents per bushel; but they can hardly be considered a remunerating crop, where the yield does not exceed 200 bushels.—They are a fine preparation for a crop of corn; and though there are different opinions on this subject, I believe they precede wheat to advantage. The most abundant crops in solid measurement are the long red or River of Plate potatoes; and from the shape of these, and their tender and crisped nature, cattle are not likely to be choked with them; but there are other kinds of a more farinaceous nature, which it is thought will yield an equal amount in weight to the acre. As feed for sheep, either for fattening sheep, or ewe sheep in the spring, they are highly valuable. Of their relative value compared with ruta бага, mangel wurtzel, carrots, parsnips and beets, I shall reserve an opinion until some future occasion.

OATS AND PEAS.—In some places on the river, oats and peas are cultivated together; about two-thirds of oats and one of peas are sown. This is generally after corn, and it makes an excellent provender for stall fed cattle.

CORN STALKS.—In conversing with many farmers, I was happy to be confirmed in my own opinion, that the stalks and husks from an acre of corn, if well cured, are fully equal for any stock to three-fourths of a ton of the best hay. Some were disposed to rate them higher. The practice of cutting up the corn at the bottom, when it is well glazed, is generally preferred.

THE ROHAN POTATO.

Few articles of human food are capable of yielding a greater quantity, and, when well prepared, few furnish a more agreeable, useful, and universal aliment. The discovery of the Rohan potato promises most extraordinary results. It is announced in the last Quarterly Journal of Agriculture, in a letter from Prince Charles de Rohan, of Switzerland, dated 25th of April, 1834. It is a new variety, and raised from the seed.—"To give you some idea," he says, "of the extraordinary produce of this potatoe, I give three examples at random. M. E. Martial, at Alais, gathered last autumn tubers weighing 13 lbs. 7 oz. 11 lbs. 9 oz. and 9 lbs. 13 oz. M. de Montel, a proprietor near me, asked me for tubers, when I could give but a single small tuber having four eyes. He weighed it for curiosity, and found that it wanted a few grains to make half an ounce. However, this small tuber being planted, produced 48½ lbs. The attorney of the Abbey of Auterive, canton of Fribourg, to whom I had given two tubers two years ago, and who, delighted with his first harvest, after having eaten and given them to his friends, planted the rest, and obtained last autumn six double horse loads and eight scuttelefuls."

This story, though most extraordinary, is quoted by the Edinburgh Journal from the "*Le Cultivateur, Journal des Progres Agricoles*," January, 1835.

WEEVIL IN GRAIN.

With a view to protect their grain from the weevil, the Shakers at Canterbury, N. H., are accustomed to sprinkle their granaries, both floor and sides, with fine newly slaked lime; and this has proved with them an effectual preventive.

INDIAN CORN.

The kinds generally planted, are the twelve and eight rowed, though the latter is considered earlier, and is on that account preferred. It bears closer planting than the larger kinds, and the average yield is rated at fifty bushels to the acre.—Many instances were stated to me of much larger crops.

An uncommonly intelligent and successful farmer in Charleston, N. H., whose farm does him the highest credit, says he seldom gets less than seventy-five bushels to the acre. He plants a small eight rowed kind, at a distance of about 3 feet 4 inches, by 20 to 22 inches. A very careful neighbour of his, equally successful in his cultivation, plants the same small eight rowed corn; and has for years, as he thinks, very advantageously practised upon the plan of selecting the smallest and earliest ripe ears for seed, and those from stalks which have more than one ear. He states, that his crops average over eighty bushels to the acre. The material objection to the twelve rowed corn with a large cob, is not that the cob is out of proportion to the quantity of grain upon it, but that it retains more moisture, and is therefore, much more likely to become mouldy, both in the shock and the bin.

A farmer on the Passumpsic river in Vermont, which empties into the Connecticut at Barnet, and on which there are many beautiful and finely cultivated farms, informed me that he one year, from a measured acre of land, obtained 117 bushels of corn; from the same land the ensuing year 109, and the third year a very large crop, the amount not remembered. This was with one manuring only, though that a copious one, of about fifty truck loads to the acre. The soil was alluvial; the corn eight rowed; and planted at a distance of three feet eight inches.

[From the Southern Agriculturist.]

ON THE COTTON AND PEA CROP, &c.

Mr. Editor—I am glad to find that efforts are making, through the medium of the *Southern Agriculturist*, to improve the mode of husbandry that has been so long neglected in the middle and upper districts of this State. But I fear while the staple article keeps up at the late and present prices, it is almost a useless endeavour to convince our farming and planting brethren of their injudicious culture. The period however is not far distant, perhaps, when the accumulating growth of cotton, and every species of manufacture, of which it is susceptible, will arrive at their full extent, and it will, consequently, decline in value. Until this time arrives, cotton will be the principal object of culture, regardless of comfort, interest being the main spring by which all human actions are governed; still we ought not to be discouraged from promulgating our practical agricultural knowledge, in the hope that it may produce some benefit to other planters and farmers. If my experience can aid in so desirable an object, it will afford me the greatest pleasure,

having myself derived much benefit from the practice of others communicated through agricultural works, particularly that under your management. I perfectly agree with Mr. Pinckney of Pendleton, in his plan for the restoration of worn out lands, with this exception, that in the section in which I am located, foreign grasses and clover* will not succeed, the latter of the greatest importance. Rotation of crops is of the utmost consequence, and perhaps there is no greater restorative to worn out lands, than the common field pea, but only the peas should be gathered when planted in corn, leaving the vines and the leaves to restore to the land in part what has been taken from it, for corn leaves nothing; the blades being stripped, and corn stalks if ploughed in the spring following, are of little value, as a manure.

When peas are intended for fodder, they should be planted on a separate piece of land, as they are a great exhauster, when vines and all are taken off, it will require a little manure for a succeeding crop. This is the most valuable article for fodder in the Southern States; they are easy of culture, not very difficult to cure and preserve, and if properly understood, every thing thrives thereon.

With regard to manuring in this section of country, it can be done but to a limited extent from leaves, in consequence of the lands being so much cleared, and the range for stock so much reduced, little benefit can be obtained, for without stock to tread and something to receive their dung, and absorb their urine, it would be fruitless to attempt any thing but on a small scale. In the upper districts these difficulties are obviated. It is beyond all doubt that the application of manure in broad cast is the best mode; next is in the drill form. The practice of applying it on each side of the plant is injudicious not only from the principle of economy but the effect produced by it. When the lateral roots which branch off in search of nourishment for the support of the plant and perfecting its fruit, get beyond the influence of this peated manure, and reach that part of the ground from which every thing is taken and drawn up to the bed, receive a check, the plant, as well as its product, must feel the effect. This will not be so much the case in placing it in the drills, and what is termed forcing of corn, is certain to be produced in dry weather, by applying the manure about the stalks of plants and the advantage is lost. In these remarks I have reference more particularly to corn, but it will apply to every species of culture.

The implements of husbandry, and their application, is next to be taken into view, and are of no less importance. What our forefathers have done, appears to have been entailed upon many of our planting and farming friends, particularly the use of the Goster or shovel plough on all occasions. This plough is useful in its place, but to make what is termed a crop by it alone, is out of the question. In breaking up old lands, the Mould-board plough is most efficient, throwing it up into beds early in the fall, at the distance intended

to be planted, and previous to planting reversing the beds. Should it be tenacious sedge land, I would recommend running fire through it, and then breaking up cross-wise with long and sharp bull-tongue ploughs, and then treated as above. In preparing land that has been the year previously planted, the beds should always be reversed, unless manure was put in them; running a water-furrow plough (a broad and long pointed shovel) in the alleys, and followed by a mould-board plough, returning the earth into the furrow made by the water-furrow plough, and so on, until the bed is made, leaving the bulk to be broken up by the water-furrow plough; this will give level beds designated by the water-furrow. When the time arrives for planting cotton, run a bull-tongue plough in the middle of the bed, to sow the seed in, and cover it with a board attached to the plough stock to which the plough-hoe is fixed, or a furrow may be run, the seeds sown in it, and then covered with a furrow on each side, leaving it until germination begins, and then knock it off with the board, this will destroy the young grass that is coming up, but care must be taken to have this done in proper time, in case of a succession of rainy weather.

When the cotton is sufficiently up, it should be cut out with a hoe the distance intended for a stand, and when it has progressed so as to make it necessary to be ploughed, a small bull tongue plough should be run close to it, not only to cut out such plants as are not upon a line but to cover the small grass among the cotton which can be done, without covering the young cotton. After which, the half shovel, or what we term the wing shovel, should be used to fill up the furrow previously made by the bull-tongue, and throwing up sufficient earth preparatory to the first hoeing, leaving the spaces between the beds to be broken up afterwards; this will give great facility in the early part of the crop.

Should the seasons be such as to endanger the crop from the accumulation of grass, I would recommend running the mould-board plough with the bar next to the cotton, one furrow on each side of the beds, throwing from it; this will take much grass from the cotton, and will cover much more in the alleys. A few days after, the grass so covered will be killed, or so much crippled that a furrow may be returned to fill that which was previously made; as to the grass in the alleys that can do but little injury before it can be controlled.—The indiscriminate application of the plough and hoe, particularly the former, is attended with the most injurious effects. Wet or dry, by many planters, they are in operation, when it must be obvious to every reflecting mind, that when the earth is highly saturated with moisture, and exposed to the influence of evaporation and the heat of the sun, is more destructive than years of proper culture. And when the earth is parched from drought, the same practice is pursued. Hence, from this cause do we frequently hear of bad crops, laying it altogether to the seasons, not bringing judgment into the question. Another error which we commit is the omission of task work, in which the lower country has the decided advantage. What stimulus is there to negroes to be put indiscriminately together to work row by row, from daylight to

* Note by the Editor of the Farmer and Gardener—Clover if planted with the tall meadow oat would succeed.

the going down of the sun? The most effective hands are put foremost, and those less so, to follow and keep pace with them: and when an exertion is made by the former, under the immediate eye of the overseer, the weaker hands become exhausted, and soon as ever the back of the overseer is turned, the strong hands slacken their pace and reduce it down to the standard of the others, and then work at their leisure. Every negro according to his ability should have task-work allotted to him when it can be done, and it will be found that more will be executed and that with more cheerfulness, allowing a gain of a little time to the negro, which is great encouragement to him.

The land that I plant is not only rolling but very much broken, and I have had for years past to exercise every ingenuity I possess, to retain the soil, adopting horizontal culture laid off by a level, leaving belts from eight to ten feet wide, at the distance of thirty yards and upwards apart, according to the land, and latterly have adopted horizontal ditches below these belts, in order that the belts should check the impetuosity of water in heavy rains, and discharge it into the ditches to preserve as much as possible the next cut, as it is termed, from washing. But, notwithstanding all these precautions, where there is any defect in levelling, the water will concentrate and pass over, producing gullies. To obviate in a great measure these difficulties, I have partially adopted, and recommended to others, not to pursue the horizontal plan exactly, but to give an inclination of the beds to the ditches, or even gullies, if they have been previously made so as merely to drain off the water from the alleys of each bed, without making any thing like a gully.

In conclusion, I would remark, that deep ploughing, and the earth well pulverized, are the only secure ways of managing broken and rolling land so that the excess of rains should be absorbed as much as possible. Shallow ploughing only prepares the soil to be washed away by the first rain that succeeds it.

Respectfully, your obedient servant,
ROBERT WATTS.

DAHLIAS.

The Edinburgh Quarterly Journal of Agriculture, contains an article on the culture of the Dahlias by James Herriot, Esq., of Ramornie; but in our present number, we have only room for

CRITERIA OF A FINE DOUBLE DAHLIA,

Copied from J. Mentall's Floriculture.

"The flower should be erect, and stand completely above the foliage; for if the peduncle be short, so that the flower be hid among the leaves, it will not be displayed to advantage.

"*Form, color, and size*, are considered the essential properties of a fine Dahlia.

"1. *Form*.—All good judges allow that perfection in form consists in the near approach to a hemisphere. The Springfield Rival may be given as an instance of the nearest approximation to a perfect flower. It is, however, too flat in the centre, and the outward petals are reflected. It is essential that the outline should form a true circle; and consequently the petals should be regularly disposed, rounded, smooth at the edges, or rose leaved, and slightly concave, but not so

as to let the back of the petals be seen in the front of the flower. Those flowers whose petals are narrow, pointed, notched, or fimbriated, as well as those that are flat or convex, however desirable for the flower border, are objectionable as show flowers; as are also those which when fully blown, exhibit the eye or disk. In some Dahlias, the petals near the centre converge, and conceal the disk, which when the florets are fully expanded, becomes exposed. These are therefore pronounced by florists imperfect flowers.

"If the hemispherical form be assumed as the point of perfection in the Dahlia, those flowers would be preferred that rather exceed than fall short of this standard. The countess of Liverpool, has been adduced as an illustration of the former, and Lady Grenville, of the latter; and the mean between these two examples, constitutes an excellent criterion whereby to judge of perfection in the form of the Dahlia.

"2. *Color*.—As it regards color, much must depend upon taste; but selfs of whatever color they may be, should be bright and distinct. In striped, spotted, tipped, or variegated varieties, the colors should be well defined, and every petal uniformly and distinctly marked. Those that are pounced, blotched, variously or irregularly marked, are inadmissible as show flowers.

"3. *Size*.—When other properties are equal, size will determine the preference; but in judging of a good Dahlia, *form* must have the pre-eminence; then *color*, and lastly *size*; but in no instance should either *form* or *color*, be sacrificed to *size*. The relative proportions of excellence in these Criteria, have been thus estimated:—*Form three, color two, size one*. Thus a Dahlia possessing the properties of *form* and *color*, would be judged superior to one having *color* and *size*, the relative proportions being as five to three.—By this standard the comparative merits of this class of show flowers have been estimated by the censors at the Exhibition of the Metropolitan Florists' Society."

ON ASHES APPLIED TO INDIAN CORN.

We think the following remarks—which we take from the letter of a correspondent in the south-eastern part of Pennsylvania—are of more than ordinary interest. Last season we made some experiments with ashes on Indian corn, which however, proved to be rather a failure; and very probably our friend has pointed out the true cause.

"The effect of wood ashes on corn in this neighborhood, is at variance with what HENRY COLMAN states (at page 215 of the Gen. Farmer) to have occurred in his experiments. After diligent inquiry, I have not found a single case in which the application to the surface after the corn had come up, that was attended with any increase in the crop. But wherever the ashes were put in the hill on land recently limed, the corn was so much better as to be apparent at some distance; and this difference continued until husking time. The quantity of ashes has been varied from half a gill to two quarts with very nearly the same result.

"I believe the time is nigh at hand, when no farmer in this neighborhood who limes his land, will try to raise a crop of corn without applying

live wood ashes—putting it in the hills while planting, and before the grains are covered with earth. Many have tried it this season, on a few rows by way of experiment; and many of the ashed rows now look as if they would produce double the quantity of corn in consequence of the application."

We presume that ashes will be still more necessary on lands that have not been limed.

Gen. Far.

ON INCREASING THE FRUITFULNESS OF PEAR TREES.

To remove a narrow ring of bark from the bearing branch of a vine, increases the size of the grapes; and this is in consequence of the accumulation of the juices which are prevented in this way from descending between the wood and the bark. The benefit of the process however, is confined to one season, for the branch eventually perishes. A more permanent advantage may be found in the partial obstruction to the descent of the juices which occurs at the junction of the graft with the stock when the latter is of a different species. Thus pear trees which grow on the stock of the quince tree, or the apple tree, are sometimes more fruitful than when the graft has been set on a pear stock. The present year has furnished an illustration of this principle.

Some of our pear trees have been very productive; but others yield very little fruit in the present season. Of "the September pear" we have three trees or branches on pear stocks, and two on apple stocks; and the former have been almost unproductive while the latter have borne abundantly.

At the point where the pear grafts unite with the apple trees, they have swelled into bulbs of more than twice the diameter of the stocks; yet the grafts, one foot above, are not greater than the stocks. This dilatation is a proof of the obstruction of the juices in their descent, having some resemblance in its increased thickness to the new wood which forms above the circular notch in a tree which has been girdled.

Lindley, in his Guide to the Orchard and Fruit Garden, has noticed such varieties of the pear as succeed on quince stocks; but we have found no intimation that the apple tree is equally eligible for some varieties of the pear. For the free bearing kinds indeed, we think the pear stock must be always preferable, but for shy bearers we are of opinion that the apple tree may be found a valuable stock.—Gen. Farmer.

GENERAL DIRECTIONS

For the Cultivation and Management of Bulbous Roots.

Situation, etc.—A southern exposure, dry and airy, and sheltered from the north winds, is preferable for most bulbs; but Anemones and Ranunculus will do better in a situation with a southern aspect, were they can be protected from the heat of noonday.

The proper compost for Hyacinths, Tulips, Crown Imperials, Irises, Ranunculus, Anemones, Crocuses, Colchicums, and most other bulbs, is the following: One third sand, one third well rotted cow dung, and one third good garden mould. Let the beds thus formed be well dug over to the depth of fifteen or eighteen inches,

that the materials may be well mixed together; a fourth part of rotten wood or vegetable mould from a swamp may be added to the above, if conveniently to be obtained, which will at all times be beneficial in giving additional lightness to the soil.

The *Amaryllis* requires a richer loam than most bulbs, and *Iris*, *Gladiolus*, and *Oxalis*, a soil rather more sandy than the general average, which also answers well for most of the Cape or South American bulbs.

The beds should be raised from two to four inches above the level of the walks; strew sand (not gravel) in the trenches made for the roots, both before and after placing them. *Sea sand* is best.

In severe weather, spread the beds with withered leaves, straw, or light rotten earth from the woods, such as is formed by the decay of leaves, to the depth of two or three inches.

Time of planting, etc.—For the *Hyacinth*, *Tulip*, *Crown Imperial*, *Lily*, *Polyanthus*, *Narcissus*, *Jonquil*, *Iris*, *Crocus*, *Colchicum*, *Star of Bethlehem*, *Snowdrop*, *Snowflake*, *Gladiolus*, and most other hardy bulbs, the preferable season for planting is the months of November and December. The *Polyanthus* *Narcissus* is more delicate than the *Hyacinth* or *Tulip*, and when planted in the open ground it is advisable to cover the beds with straw, leaves, etc. to the depth of six or seven inches, and uncover them about the end of March.

The different species of *Amaryllis* *Ixias*, *Ferraria* *Tigrida* or *Tiger Flower*, *Double Tuberosa* and most other delicate bulbs, may be planted during the months of November and December, in pots, when intended to be sheltered during the winter, or they can be kept in dry sand until April or May, and then be planted in pots, or in the open ground.

MEXICAN TIGER FLOWER, (*Ferraria Tigrida*.)—The root of this flower should be planted in April, or early in May, in a light sandy soil, in a warm situation: it will also do well in a pot, and flowers in July. In November cut off the stalk, take up the root, dry it well, and put it away in dry sand in the cellar till the spring. If there be any offsets, remove them, and plant them separately from the mother root.

Depths and distances.—The *Hyacinth*, *Amaryllis*, *Martagon*, and other large Lilies, and the *Pæony*, should be planted at the depth of four inches; *Crown Imperial* and *Polyanthus* *Narcissus*, five inches; *Tulip*, *Double Narcissus*, *Jonquil*, *Colchicum*, and *Snowflake*, three inches; *Bulbous Iris*, *Crocus*, *Arum*, small *Fritellaria*, *Tiger Flower*, *Gladiolus*, and *Snowdrop*, two inches; *Ranunculus*, *Anemone*, *Oxalis*, and *Dog's Tooth Violet*, one inch;—always measuring from the top of the bulb. The rows should be about ten inches apart, and the roots be placed from four to six inches apart in the rows, according to their size.

It is very desirable that plants or bulbs in pots should be named. The best mode of doing this is to take a flat slip of wood, sharpen one end, rub a little white lead on two or three inches of its smoothest surface at the other end; write the name with a black lead pencil on the white lead when it is about half dry, and then insert the

stick in the pot. The pencil mark will dry in with the paint, and nothing but the decay of the wood will efface it.

When the bloom is over, and the paint put on a yellowish decayed appearance, take up the roots, cut off the stem and foliage, within an inch of the bulb, but leave the fibres, &c. attached to it, and spread them in an airy room for two or three weeks to dry; after which, wrap each root carefully in paper, (as the air is very injurious to bulbs) or cover them with sand made effectually dry, and plant them at their proper seasons, as before directed.

Method to bloom Hyacinths and other Bulbs in the Winter season, in pots or glasses.—Single *Hyacinths* and the earliest of the double are to be preferred. Single *Hyacinths* are generally held in less estimation than double ones; their colors, however, are more vivid, and their bells, though smaller, are more numerous; some of the finer sorts are exquisitely fine: they are preferable for flowering in winter to most of the double ones, as they bloom two or three weeks earlier, and are very sweet scented. *Roman Narcissus*, *Double Jonquil*, *Polyanthus* *Narcissus*, *Double Narcissus*, and *Crocus*, also make a fine appearance in the parlour during the winter. It is a remarkable circumstance of the *Crocus*, that it keeps its petals expanded during a tolerably bright candle or lamp light, the same way as if in the light of the sun. If the candle be removed, the *Crocus* will close its petals, as it does in the garden when a cloud obscures the sun; and when the artificial light is restored, open again, as they do with the return of the direct solar rays.

Bulbs intended for blooming in pots during the winter season, should be planted during the months of October and November, and be left exposed to the open air until it begins to freeze, and then be placed in the green house, or a room where fire is usually made. They will need moderate occasional waterings, until they begin to grow; then they should have an abundance of air in mild weather, and plenty of water from the saucers, whilst in a growing state; and should be exposed as much as possible to the sun, air, and light, to prevent the leaves from growing too long, or becoming yellow.

The roots of the *Double Roman Narcissus*, if planted in November, will flower in January; they may be put into pots of earth or into bulb glasses with only water; should be kept sheltered as soon as the weather turns cold. Its beauty, fragrance, easy culture, and cheapness, make it one of the most desirable flowers imported for the ornament of our rooms.

Those intended for glasses should be placed in them about the middle of November, the glasses being previously filled with pure water, so that the bottom of the bulb may just touch the water; then place them for the first ten days in a dark room, to promote the shooting of the roots, after which expose them to the sun and light as much as possible. They will blow, however, without any sun; but the colors of the flowers will be inferior. The water should be changed as it becomes impure; draw the roots entirely out of the glasses, rinse off the fibres in clean water, and wash the inside of the glasses well. Care should be taken that the water does not freeze, as it would

not only burst the glass, but cause the fibres to decay. Whether the water be hard or soft is not of much consequence—soft is preferable—but must be perfectly clear.

FOREIGN ABSTRACT.

Advices from Liverpool to the 2d October, are received. The recent ebullitions of violence in this country are severely commented upon in the English papers. O'Connell was on his return to Ireland. There was a great scarcity of money in the London market, which it was supposed would be but temporary. Nothing important from France, except that she seemed quietly to bow to the despotism which has been provided for her.—The vines had suffered much from storms and it was supposed the vintage would be shorter than any since 1829. The Germanic forces were, in part, to be withdrawn from Italy. From Spain we have rumors of the fleeing of the queen and ministry from Madrid. General Mina has been appointed again Captain general of Catalonia.—From Portugal there is nothing important, except the negotiations and counter-negotiations for the marriage of the queen. As things now stand, the queen is likely to be permitted to have time to dry the tears upon her cheek for the death of her husband, before she will be accommodated with another. This will be rather cruel, as she so condescendingly agreed to supply the place of her deceased lord, merely to please her loving subjects, who were so distressed that she should be without a protector. The markets in England for cotton were inactive and declined from 1-8d to ¼d per lb. for the better kinds of American.

DOMESTIC SUMMARY.

A great freshet has occurred in the western part of N. York, corn in the field, fences, trees, logs, lumber, grain in stacks, corn on the stalks, have been swept away, and fears were entertained for some of the aqueducts on the canals, as well as for the safety of several vessels on the lakes. Several lives were also lost. A meeting was held at Charleston, South Carolina on the 22d October for the purpose of expressing the opinion of the citizens of that city, upon a project for extending a railroad from the Ohio river into the state of South Carolina. The meeting was addressed by General Hayne and others, with great power and effect, and resolutions approbatory of the measure adopted, and a committee appointed for ascertaining what measures it will be proper to adopt, to carry it into effect. Mr. John Moss, of Philadelphia, who recently purchased the site of the Arch street prison, is about to erect a Hotel on it. It is to be 5 stories high, with a basement, and will contain 29 stores, 82 parlors 200 bed rooms and 25 rooms of other descriptions, making in all 336 rooms. The location of the whole line of the Pennsylvania and Ohio canal has been made, and will be put under contract immediately. The directors of the canal from Columbia, Pa., to tide have directed a survey of the route of the first ten miles of the route. Towards public works we entertain but one sentiment; we believe them public blessings, and we wish them entire success. An Englishman named James Freeman, was detected on Sunday morning, in breaking into the Merchants' Bank in this city.—It is kept in the same house of the late U. S. Branch. He has been committed to prison.

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—fire blight in Pear trees—account of the late cattle fair
and sale, of the proprietors—Colman's notes by the way
containing interesting accounts of feed for cattle, of the
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fruitfulness of pear trees—directions for cultivating bul-
bous roots—foreign abstract—domestic summary—prices
currents—advertisements, &c.

BANK NTOE TABLE.		
Corrected for the Farmer & Gardener, by Samuel Win- chester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.		
U. S. Bank,	par	
Branch at Baltimore,	do	
Other Branches,	do	
MARYLAND.		
Banks in Baltimore,	par	
Hagerstown,	1/2a	
Frederick,	do	
Westminster,	do	
Farmers' Bank of Mary'd, do	do	
Do. payable at Easton,	do	
Salisbury,	5 per ct. dis.	
Cumberland,	1/2a	
Millington,	do	
DISTRICT.		
Washington,		
Georgetown,	Banks, 1/2	
Alexandria,		
PENNSYLVANIA.		
Philadelphia,	1/2a	
Chambersburg,	1/2a	
Gettysburg,	do	
Pittsburg,	1/2a2	
York,	1/2a	
Other Pennsylvania Bks. 1/2a2		
Delaware [under \$5],	3a4	
Do. [over 5],	1/2a3	
Michigan Banks,	5a	
Canadian do,	5a	
VIRGINIA.		
Farmers Bank of Virginia,	1/2a3	
Bank of Virginia,	do	
Branch at Fredericksburg,	do	
Petersburg,	do	
Norfolk,	do	
Winchester,	do	
Lynchburg,	do	
Danville,	do	
Bank of the Valley,	do	
Branch at Romney,	1/2	
Do. Charlestown,	do	
Do. Leesburg,	do	
Wheeling Banks,	1/2a2	
Ohio Banks, generally,	2/2a3	
New Jersey Banks gen.,	1/2a2	
New York City,	1/2a	
New York State,	2/2a3	
Massachusetts,	2a2 1/2	
Connecticut,	2a2 1/2	
New Hampshire,	2a2 1/2	
Maine,	2a2 1/2	
Rhode Island,	2a2 1/2	
North Carolina,	2/2a3	
South Carolina,	2/2a3	
Georgia,	3a3 1/2	
New Orleans,	4	

BALTIMORE PROVISION MARKET.			
	PER.	FROM.	TO.
APPLES,	barrel.	—	—
BACON, hams, new, Balt. cured,	pound.	11	11 1/2
Shoulders,	"	10	—
Middlings,	"	10	—
Assorted, country,	"	9	9 1/2
BUTTER, printed, in lbs. & half lbs.	"	18 1/2	25
Roll,	"	—	—
CIDER,	barrel.	—	—
CALVES, three to six weeks old,	each.	3 00	6 00
COWS, new milch,	"	17 00	30 00
Dry,	"	8 00	12 00
CORN MEAL, for family use,	100lbs.	1 87	2 00
CHOP RYE,	"	1 62 1/2	1 75
EGGS,	dozen.	—	—
FISH, Shad, No. 1, Susquehanna,	barrel.	7 75	—
No. 2,	"	6 75	—
Herrings, salted, No. 1,	"	4 25	—
Mackerel, No. 3,	"	4 50	—
Cod, salted,	cwt.	2 25	2 75
LARD,	pound.	10	10

FOR SALE,
THREE fine young bulls—the one 3 years old, and the
other two, two years old, each. These animals are
crosses of the Improved Short-horn Durham, and Alder-
ney breeds, and would be valuable acquisitions to any
gentlemen wishing to breed either for the dairy or for
beef, as the progeny of such crosses, combine in an emi-
nent degree both the qualities of taking on fat, and of
yielding copious supplies of milk.
For prices, enquire of the editor of the Farmer and
Gardener. Terms, cash. nov 3 St

A DURHAM BULL for sale—Apply at this office.
june 2

BALTIMORE PODUCE MARKET.			
These Prices are carefully corrected every MONDAY.			
BEANS, white field,	bushel.	2 50	—
CATTLE, on the hoof,	100lbs.	5 00	6 00
CORN, yellow,	bushel.	new 50to65	—
White,	do	50to65	—
COTTON, Virginia,	pound.	18 1/2	—
North Carolina,	"	—	—
Upland,	"	18 1/2	20
FEATHERS,	pound.	37	40
FLAXSEED,	bushel.	1 25	1 37 1/2
FLOUR & MEAL—Best wh. wh't fam	barrel.	7 00	—
Do. do. bakers,	"	6 00	6 12
Do. do. Superfine,	"	6 00	6 25
SuperHow. st. in good de'd	"	6 00	6 25
" " wagon price,	"	6 00	6 12
City Mills, extra,	"	6 12	6 25
Do.	"	5 87	6 00
Susquehanna, firm & scarce	"	6 00	6 12
Rye,	"	4 50	4 62
Kiln-dried Meal, in hlds.	hhd.	19 00	20 00
do. in bbls.	bbl.	4 37 1/2	4 50
GRASS SEEDS, red Clover,	bushel.	5 00	5 75
Timothy (herds of the north)	"	2 75	3 25
Orchard,	"	2 25	3 00
Tall meadow Oat,	"	2 00	2 50
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.	—	15 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
HOGS, on the hoof,	100lb.	7 00	7 50
Slaughtered,	"	—	—
HOPS—first sort,	pound.	12 1/2	—
second,	"	10	—
refuse,	"	8	—
LINE,	bushel.	33	35
MUSTARD SEED, Domestic,	"	5 00	6 00
OATS,	"	32	34
PEARS, red eye,	bushel.	—	—
Black eye,	"	—	1 25
Lady,	"	—	—
PLASTER PARIS, in the stone,	ton.	—	3 50
Ground,	barrel.	1 25	—
PALMA CHRISTA BEAN,	bushel.	2 00	—
RAGS,	pound.	3	4
RYE,	bushel.	75	78
Susquehanna,	"	none	—
TOBACCO, crop, common,	100 lbs	4 25	5 00
" brown and red,	"	5 25	6 50
" fine red,	"	6 00	7 50
" wrappery, suitable	"	—	—
" for segars,	"	10 00	16 00
" yellow and red,	"	8 00	11 00
" good yellow,	"	11 00	16 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality, ..	"	4 00	—
" ground leaf,	"	5 00	8 00
Virginia,	"	5 00	10 00
Rappahannock,	"	—	—
Kentucky,	"	8 00	14 00
WHEAT, white,	bushel.	1 27	1 30
Red,	"	1 17	1 25
WHISKEY, 1st pf. in bbls. }	gallon.	37	37 1/2
" in hlds. }	"	33 1/2	—
" wagon price,	"	30	bbls.
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 50	—
To Wheeling,	"	1 75	—
Wool, Prime & Saxon Fleeces, ...	pound.	62 to 75	32 to 34
Full Merino,	"	52	62 30 32
Three fourths Merino,	"	47	52 28 30
One half do,	"	42	47 26 28
Common & one fourth Meri.	"	38	42 25 26
Pulled,	"	38	42 26 28
Wagon price best bakers' Flour 5 75a5 87.			
No change in Wool—in good demand at quotations.			

TO AGRICULTURISTS—The analysis of Soils,
marls, mineral waters, and other productions, interest-
ing to those engaged in Agricultural pursuits, is per-
formed with promptness and accuracy, by
TYSON & FISHER, Chemists,
no 3 Druggists, No. 192 Market street, Baltimore.

A SPLENDID DURHAM BULL.
THE editor of the Farmer and Gardener has for sale
that beautiful and improved Durham short horn bull,
LEON. He was 5 years old on the 8th of August last,
and has been well taken care of; his color is pure white,
with a hide as glossy as satin; he is perfectly docile, and
is a bull of uncommon fine temper, and although but a
few days off a travel of between 70 and 80 miles, and has
been fed all the season on grass, is in fine condition.
Any person wishing to possess himself of one of the best
blooded animals in the country, will do well to apply
speedily. The following is his
PEDIGREE.
The improved Durham short horned BULL LEON,
bred by Wm. H. Freeman, Esq. of Baltimore. Calved
on the 8th of August, 1830; now in the possession of S.
Canby, of Woodside, Del.
"Leon" is by Gloucester, dam Flora.
"Gloucester" was imported in July, 1826, by Mr. J. H.
Powel, calved Feb. 28th, 1825, (bred by J. Whitaker,
esq. one of the most celebrated breeders in England) by
Frederick, dam Adela, (bred by Mr. Whitaker; gave with
her first calf 24 quarts per day) by Orpheus; g d Alfred,
(bred by Mr. Hestler, gave 24 quarts per day) by Alfred,
(200 guineas was refused for Alfred) gr g d by Windsor,
gr gr g d Old Daisy,) bred by Mr. C. Collings, (gave 32
quarts daily) by Favorite, sire of Comet; gr gr gr g d by
Punch; gr gr gr gr g d by Hubback.
"Frederick," roan, (bred by Mr. Charge) got by Hul-
ton, dam Orbit, by Comet; (Comet sold for 1000 guineas;)
g d Splendor by Comet; gr g d Flecked Twin by Major;
gr gr g d Red Simon by Favourite; gr gr gr g d Fleck-
ed Simon by Bartle; gr gr gr gr d Old Simon, (bred
by Mr. Charge,) descended from the Studley White Bull.
"Hulton," (bred by Mr. Charge,) got by Newton, dam
Meteor by Comet.
"Newton," (bred by Mr. Charge) got by Comet, dam
Fanny by Mr. Charge's Grey Bull.
"Comet," red and white roan, calved in 1804, (bred
by Mr. Collings,) got by Favourite, dam Young Phoenix,
by Favourite; g d Phoenix by Foljambe, &c. &c. (Comet
was sold for 1000 guineas at Mr. Collings' sale, Oct.
11th, 1810.)
"Gloucester's" pedigree can be found more at large in
a work called "Hints for American Husbandmen, pub-
lished by the Pennsylvania Agricultural Society," in 1827
—he is also recorded in the English Herd Book.
"Flora," (dam of Leon) was got by Sampson, dam Bet-
ty, g d Old Betty; Sampson by son of Ossian, d. by Comet;
Ossian by Favourite; Favourite by Bolingbroke; d.
Phoenix by Foljambe; g d by Alcock's Bull; gr g d by
Smith's Bull; gr gr g d by Jolly's Bull.
"Flora's" pedigree can also be found at large in the
'Memoirs of the Pennsylvania Agricultural Society for
1824,' and is likewise recorded in the English Herd Book.
J. H. Powel, esq. considers "Gloucester" one of the
finest Bulls ever imported by him. no 3

SAXONY RAMS.
The editor of the Farmer and Gardener has for
sale 2 full blooded Saxony RAMS, and 2 1/2 blood-
ed do. These sheep are of a family remarkable
for their fine fleece, their wool always command-
ing the best prices in the market.
ALSO
The bull *Brilliant*, a large sized animal of the
Improved Durham Short-horn breed. He is red
and white; was got in England, and calved in
Frederick county, Md., on the 12th May 1829.
His dam was Matchless, got by Favorite, (purchas-
ed at the sale of the late R. Colling, a celebrated
breeder) son of Favorite, dam by H. Allison's
Gray bull, sire Orlando, that died on the passage
from Liverpool, out of Rosina, from Yorkshire,
that gained the highest prize premium of ten
sovereigns at a Cattle show in Manchester, Eng-
land. no 3

FOR SALE.
A HEIFER rising a year old, with a pedigree which
makes her a 15-16ths bred improved Durham Short
horn—she is well grown, and prettily marked.—Enquire
of the editor. no 3

LEON.

THE splendid bull LEON, is now at *Clairmont Nursery*, where he will remain a few weeks. He is a full blooded improved Durham short horn, and allowed to be one of the best bred animals in the country. He will serve Cows at \$5 each. He is milk white, with a hide as glossy and soft as satin. For his pedigree, see the advertisement, in which he is offered for sale in this day's paper. no 3

AGRICULTURAL AGENCY IN PHILADELPHIA.

IRVINE HITCHCOCK, late proprietor of the American Farmer Establishment, Baltimore, having sold that concern, has removed to Philadelphia and established himself as an Agent for the purchase and sale on commission, of choice Live Stock, Seed Grain, Grass Seed, Fruit and Ornamental Trees, and other productions of the Nursery and Garden, Agricultural Implements and Books, and in fine, of all articles and commodities in the farming and gardening line.

He hopes that his experience in this business, the fidelity and promptness with which he has heretofore executed orders, together with his extensive acquaintance and correspondence with the most eminent stock breeders, farmers, nurserymen and gardeners in the union, will be deemed sufficient guarantees that all business entrusted to him will be both ably and faithfully performed; and that the eligibility of this city as a point, between which and almost every other important place in the Union, transportation, either by land or water, is exceedingly convenient and cheap, will operate as an inducement with those requiring such services to send him their orders.

It is expected that letters when unaccompanied by a remittance or a positive order, will be post paid.

Office at No. 223 Arch street, between 6th & 7th sts. On sale now, a variety of Cattle of the improved Durham Short Horn breed, several of which are *Herd book* animals.

Also, Cattle of desirable descriptions, of pure blooded Devonshire stock.

Also, a supply of the best NORTHERN MILCH Cows, selected by an experienced Dairyman and breeder, without regard to blood or pedigree, but solely on account of their superiority as DEEP MILKERS.

Also, Bucks and Ewes of the most approved breeds of both long woolled and fine woolled sheep.

Also, several Jacks and Jennies, some of them of very superior size and character as breeders.

I. H. also expects to receive shortly a few bushels of the celebrated SHORT (or shot) WHEAT, and a supply of GAMA GRASS SEED, and of SKINLESS OATS. Also the best of White Mulberry Seed and Silk Worm Eggs. The white Mulberry tree from one to three years old, and the *Morus Multicaulis*, or New Chinese Mulberry, will be supplied at moderate prices in the proper season.

Grass and Clover seeds of the best quality can be furnished at short notice and at moderate prices.

no 15

m3t

SHORT-HORN STOCK FOR SALE.

The subscriber intending to leave his country residence, offers for sale part of his Durham Short-horn Stock on reasonable terms.

Some are full blooded—others of half, three-fourths, seven-eighths blood, all derived from the stock of Mr. Powell.

There are some fine cows now in milk, some fine heifers and calves—One extraordinary cow, Flora, is offered for sale—She is by Mr. Powell's imported Malcolm. This cow when fresh, yields from sixteen to twenty pounds of the finest butter per week, and this butter is made as wanted for the table, by stirring the cream with a spoon in a bowl and usually in less than a minute of time.

I also offer for sale a young bull, very fine, from Flora, now 17 months old, and a heifer calf of about four months. Also some fine sheep—full blooded South-downs.

C. A. BARNITZ.

Springdale, York, Pa. Sept. 29, 1835.

Oct. 6.

3t.

TERMS OF THIS PAPER.

1. Price five dollars per annum, payable in advance. 2. When this is done, 50 cents worth of any kind of seeds on hand will be delivered or sent to the order of the subscriber with his receipt.



FRUIT AND ORNAMENTAL TREES, SHRUBS, &c.

ROBERT SINCLAIR, successor of Sinclair & Moore, in this department of the business of the late firm, offers for sale at his NURSERY, 3 miles east of the city of Baltimore, where the proprietor resides, and will be pleased to show customers his extensive assortment of Apples, Peaches, Plums, Cherries, Apricots, Pears, Quinces, Gooseberries, Catawba and other Grapes, Plants and Cuttings; also, Ornamental Trees and Shrubs, among which are the much admired *Morus Multicaulis*, and Italian White Mulberry for feeding Silk-worms and ornament; the Chinese Ailanthus, or Tree of Heaven, English Elm, Sugar and Silver leaved Maple, Horse Chesnut, Madeira Nut or English Walnut, silver leaved Poplar, Catalpa, European and American Linden, Balsam Fir, Weymouth or white Pine, European and American Larch Trees, Arborvitae, a large and splendid assortment of Hardy and Indian Roses, and Ornamental Shrubs, Plants, mostly of large size and very thrifty, occupying an extent of about 20 acres.

The questions having been repeatedly and seriously put to him by persons residing in Baltimore, whether he had any Peach or Apple Trees old enough to transplant, and believing, therefore, that if persons living within three miles of his nursery, were ignorant of these facts, that others more remotely situated might be expected to be equally uninformed, he has thought it would not be inopportune to make a statement of the number of some of the prominent articles on hand, and having counted the same, reports the following, among numerous other varieties, as ready for transplantation:

Grafted Apple Trees of all sizes,	21,120
Budded Peach do. of 1, 2 and 3 years old,	16,080
Balsam Fir, Silver Fir, or Balm of Gilead,	500
English Lime or Linden Trees, imported last winter, 4 to 6 feet high,	500
English Gooseberries, 20 of the best sorts and largest fruit,	500
English or Scotch Larch, 3 feet high,	500
<i>Morus Multicaulis</i> , or new Chinese Mulberry, so highly prized for feeding silk-worms, as also for ornament,	2,000
Yellow Locust Trees from 6 to 10 feet, best sort,	2,000
Catawba, Isabella, and other grapes plants—many three years old, and would bear next year if removed this fall,	2,000
Vines, Creepers, Asparagus, Rhubarb, (for tarts and pies.) Plants; hedging thorns, &c.	

All sold at low prices, as will appear by his catalogue just published, and to be had gratis of the proprietor, or at the Maryland Agricultural Repository of Robert Sinclair, junior—or they will be sent by mail if requested.

The proprietor would prefer that all orders intended for him should come to him direct, unless more convenient to the party, and then through R. Sinclair, junior, seedsman, Light, near Pratt street, at the Maryland Agricultural Repository.

Every possible care will be observed by him towards every order with which he may be favoured, it being his intention to do every thing within his power to promote the interest and give satisfaction to his customers. All purchases made of him will be delivered in town, when desired, free of cartage.

All plants, trees, and other articles purchased of him, after delivery at the nursery, or as per order, are to be at the risk of purchasers, as it cannot be presumed, that, after he shall have faithfully executed his orders that he can be held responsible for miscarriages and accidents over which he has no controul.

*The best way to go to the Nursery is out N. Gay st. taking the Bel-Air or new cut road, for about a mile, where there is an index board pointing in the proper direction, other indexes or sign boards further on, will indicate the right road. oc 20 4t

Printed by Sands & Neilson, N. E. corner of Charles and Market streets.

MULBERRY TREES AND SEEDS.

100,000 Chinese Mulberry or *Morus Multicaulis* of various sizes and from \$25 to \$30 per 1000.

150,000 White Italian Mulberry at very low rates by the 1000 or larger quantity.

200 lbs. White Italian Mulberry seed.

Also the following superior large sized trees which now form a Mulberry orchard—but must be removed:

2000 Chinese Mulberry 3 years old $7\frac{1}{2}$ to 8 feet high.

2000 do do 2 do $5\frac{1}{2}$ to 6 do

2000 do do 3 do and budded on the

White Mulberry which have proved to be much more hardy than those from cuttings.

These 6000 trees are the greatest acquisition that any silk culturist can possibly obtain, and there is not another equally valuable collection for sale in the Union, as those who have such will not part with them.

50,000 cuttings of the Chinese mulberry at reasonable rates by the 1000, &c.

Fruit and Ornamental Trees of all kinds, Garden seeds, Bulbous roots, Green-house plants, and every other article promptly supplied and at very moderate prices.

Wm. PRINCE & SONS.

oct 20

4t

CHOICE DOUBLE LARK-SPUR SEED.



The subscriber offers for sale, put up in packets of 12½ cts. each, the most beautiful *Delphinium Ajacis fl. Pleno*, ever flowered in this country. The seed was grown the present season, and this splendid flower is thus described by the experienced horticulturist of whom the seed was procured: "The

trusses of flowers are above a foot in length, on a stately stem of near three feet, are as double as roses; in fact they more resemble Hyacinths, and combine every shade of color from the darkest purple to the most delicate lilac, and from the most beautiful pink to snowy white, with emerald green centres; but in order to have them of this rich description, it is necessary to sow the seed early in the month of October, as real gardeners know that spring sown seed will not flower half as well as that put down in the fall—it should be sown in a little bed by itself, of light rich soil, well pulverized with the spade and rake—on the approach of winter cover it with straw or brush as you would spinnage, which remove in the month of April, after which keep the ground loose and clean. Larkspurs should not be transplanted." A 12½ cent paper embraces all the varieties mixed together.

BULBOUS ROOTS.

A superior collection of BULBOUS ROOTS, consisting of Hyacinth and Tulip Roots of various sorts and colors, Narcissus, Ranunculus, Crocus, &c. Printed directions will be furnished.

Now receiving from our Seed Garden, Europe, &c. a full collection of GARDEN SEEDS, growth 1835, among which are many sorts fine Peas, Onion Seed, Parsnip, Carrot, Beet, Yellow Turnip, Radish, &c.

Also for sale—500 dozen POTATO ONIONS, a very mild Onion and immense product. They should be planted about the last of October.

R. SINCLAIR, Seedsman,

Light, 4 doors N. of Pratt st.

oc 13

RUFFIN ON CALCAREOUS MANURES,

SECOND EDITION, just received at this office.

ALSO,

A few pounds of the celebrated SKINLESS OATS, price 50 cents per lb. said to produce 80 bushels per acre.

R. SINCLAIR, jr. Seedsman,

connected with this office

oc 13 2t

NOTICE TO CAPITALISTS.

THE undersigned having been engaged for a number of years past in the Linnean Garden & Nurseries at this place, in a department where he has had every opportunity of becoming thoroughly acquainted with the business, wishes to form a connection with some person of capital, either as active or silent partner, for the purpose of carrying on the *Nursery & Garden Seed business*. To a person wishing to engage in a lucrative business, it is an opportunity rarely to be met with. Any communications addressed to the subscriber, will be treated as strictly confidential. G. R. GARRETSON.

Flushing, L. I.—Sept. 1st, 1835.

sep 8

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 28.

BALTIMORE, MD. NOVEMBER 10, 1835.

Vol. II

THIS publication is the *successor* of the late **AMERICAN FARMER**,

and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, NOV. 10, 1835.

THE SILK MANUAL.

Sinclair & Moore and Robert Sinclair, Jr., proprietors of the *Farmer and Gardener*, Baltimore, announce to the public that they will publish in the course of the present week, a complete *Manual of the Mulberry and Silk Culture*, compiled by the editor of said paper, from the most approved works upon the subject. It will contain—1. a brief historical view of the silk business—2. directions for sowing the Mulberry seed, nurturing the Mulberry plant, transplanting it into hedges, or standard orchards, and the subsequent management thereof—3. the mode of preserving and hatching the silk-worm eggs; the manner of rearing and feeding the worms, the mode of airing the laboratories, and the prevention and treatment of their several diseases—4. the manner of constructing a cheap laboratory or cocoonery—5. the process of reeling, dying, and making sowing silk, twist, &c., together with calculations of the probable nett produce of given quantities of land set in Mulberry, as tested by actual results, both in this country and Europe. In which calculations it will be clearly and satisfactorily demonstrated that an acre of ground properly cultivated in Mulberry, is capable of feeding a sufficient number of worms to realize from the silk raised therefrom, after defraying all expenses of cultivation, a sum exceeding \$560. In addition to the interesting matter contained in the manual, which is full upon every subject connected with the culture, it will have a copious and well digested *Index*, made so easy that any thing required can be found without difficulty. In fine it will comprise every thing that a farmer who desires to enter into the culture need know.

Orders for the above work will be received, post paid, for any number of copies, by either the editor or proprietors. As the number of copies in pamphlet form will be limited, and numerous orders have already been received, persons wishing to secure a supply will do well to make early application.

BOOKSELLERS, POSTMASTERS AND STORE KEEPERS at a distance, can have their orders promptly filled.

CORN SHELLERS, AND STRAW CUTTERS.

As the season has arrived when both these labor saving machines should be called into the

service of farmers, we take the liberty of reminding them, that if they value time, and appreciate economy, they should not lose a moment in procuring one of each.

The CORN SHELLER with the vertical iron wheel, is, beyond comparison, one of the most powerful machines ever invented. It is capable, by hand-power, to shell 20 bushels of corn an hour, and this without occasioning any great distress to the person engaged. Among the striking good qualities which it possesses, and which so recommend it to favor, the very little room that it occupies, is certainly not the least, nor should its great simplicity be overlooked. Besides the astonishing velocity with which it does its work, thus enabling the farmer to overcome time in the getting of his crop of corn to market, it does it so cleanly, and so entirely deprives the cob of all its grains, that one is lost in amazement that so small and unpretending an implement, in appearance, could perform with so much certainty and effect.

Of STRAW CUTTERS, there are kinds out of number, and at prices as variant; ranging, as in size, from \$5 to \$75: thus, very properly, suiting the price to the quantity of work to be performed, and the ability of the farmer to buy. It used to be said in the good old days of the eighteenth century, when utility was consulted more than fashion, that no gentleman should ever dream of going to farming without a wife—and truly, there is much of the genuine philosophy of human nature in this opinion: for in the name of all the Saints, what comfort is there about a house, whether it be a town or country one, unless there be a wife in it? In fact, the house without a wife, and a good one, is more insufferable than the plagues of Egypt! And if a wife be indispensable to the comfort of the domestic hearth, and who doubts it,—is not a straw cutter as essential to the comfort and economy of the barn yard? It enables the farmer to reduce his coarse straw, hay, corn stalks, and corn husks, so that his horses and cattle can eat them without waste, and with perfect ease to themselves: provender cut in this way, and steamed or scalded, will go one-third farther, and of course the farmer saves one-third, and as the old saw has it, a penny saved, is a penny gained. If then with the aid of one of these provender-economists, the farmer is enabled

to send one-third more hay to market, would not interest tell him that he should buy a straw cutter and get rich on saving?

THE BLIGHT IN FRUIT TREES.

Washington County, Nov. 5th, 1835.

Mr. Editor—Through the medium of your invaluable paper, I wish to gain a piece of information in which I as well as farmers generally are deeply interested; which is, to know the cause of smut or blight on the body of young apple trees, causing the side so affected to decay and be worm eaten: and what remedy must be applied to prevent a total decay of the trees so affected.

A Washington County Farmer,
And a Subscriber.

REPLY BY THE EDITOR OF THE FARMER AND GARDENER.

The books are very full upon the subject of the blight in fruit trees, and while one portion of the writers ascribe it to the injurious effect of fogs and easterly winds at particular seasons of the year, another with more plausibility, according to our poor opinion, impute it to the effect of insects penetrating the coatings of the bark, and thus producing a cankerous exudation of the sap and ultimate decay of the tree. A correspondent, in Bradley's treatise on gardening, instances a garden which was exempted from blight owing to its proximity to a saltpetre refinery, while others in its vicinity, but removed beyond the influence of the steam from this establishment, suffered severely. He, therefore, concludes that the specific agent in the prevention, was the steam, or nitrous vapor proceeding from the saltpetre, and that it destroyed the eggs of the insects as well as the insects themselves. If this suggestion be correct, then a fumigation of the trees with saltpetre would prove efficacious; but were we to make an effort to destroy the cause of the blight, we should combine sulphur with the saltpetre; and precede either or both, by washing the diseased part, if not the whole tree, with a strong solution of tobacco and chloride of lime, and when that had been absorbed and exhaled, we would pass a brush dipped in spirits of turpentine over all the diseased parts. The aroma of this essential oil is not only offensive to almost all vermin; but particularly so to those which infest fruit trees.

Trees diseased with the blight have been frequently cured by being washed in stale urine—kept for a month or two before being used. The stale urine have repeatedly succeeded, when appli-

cations of it in a new state, have proved of no use whatever. We are not surprised that this difference in result should have taken place, because, there is certainly no article which so materially changes by keeping. While newly made chamber-ley is perfectly tolerable to the human sense of smell, that of a month or two old is so insufferable, that one would well nigh as lief come in contact with the pestiferous exhalations of the pole-cat as with it. Whether this greatly increased quantum of noxious aroma, is owing to the evaporation of the more purely aqueous parts of the liquid, leaving a substance highly charged with animal, resinous, and oleaginous matter, held in solution, is not material. It is very certain that, in its condensed form, it throws out a most unsavory effluvia, which, we presume, would prove as disagreeable to the insect tribe as it does to the biped race.

Strong solutions of *soot*, and *salt*, put on with a brush, have in numerous instances effected cures.

In parts of Upper Canada, *soft soap made hot* and put on with a brush, of the consistence of paint, has had the effect not only to remove the diseased bark, but to replace it by a new healthy one, and to resuscitate the trees completely.

Dr. Mease says that Mr. Cooper, of New Jersey, by accident discovered some years since, that a tree upon which a number of iron hoops and other articles of iron had been hung, remained free from blight, while all the rest suffered severely. Since that year he has constantly encircled two or three branches of every tree with an iron hoop and with uniform success.

It is recommended to paint the body of the tree with a mixture of water and rich unctuous clay, brought to the consistence of paint.

Washing the trees with solutions of Chloride of lime, is also spoken highly of.

MARL.

We were sent a few weeks since by a subscriber in Perquimans county, North Carolina, a specimen of shell marl found on the estate of Mr. John G. Wilson of Murfreesboro, in that state. It is one of the richest parcels we have ever seen, composed almost entirely of small shells, so soft as to be cut with ease with a knife, and in that state that they will very readily fall into powder by being spread on the ground, and submitted to the action of the atmosphere. It struck us on inspection that it contained fully 80 per cent. of lime; but on shewing it to Mr. Philip T. Tyson, a most skilful and experienced chemist, after examining it, he said it did not contain more than 70 per cent., but that it was among the richest specimens he had ever seen, and was fully equal to the best shell marl found on the eastern shore of this state; that it would not require the action of fire to prepare it for the soil, but would do, in its then state, to spread thereon.

To the owner of the estate on which this calcareous deposit has been found, as well as to the neighborhood, it will prove an inexhaustible source of wealth, and we trust a free use will be made of it, and that such experiments will be tried as will test its relative value as a manure.

GREAT PRODUCE OF RYE.

Mr. Warham Kingsley, of Westhampton, sowed in 1834, two bushels of rye on two acres and

twenty rods of land, (including rocks and stumps) owned by Mr. Anthony Fisher, and harvested the same in the year 1835, which produced one hundred shock, ten of which having been threshed and cleaned, yielded thirteen bushels and four quarts of rye—and he believes there will be one hundred and thirty bushels of rye, when it is all threshed and cleaned.

WORK FOR NOVEMBER.

This delightful month has come in as soft and balmy as the "distilling dews of evening," and would seem to remind one, that, as it is among the most prolific in the Calendar, in its dedications to the shrine of love, so should its breathings be equally as inspiring and tempting to the husbandman, in urging him forward in the performance of his autumnal toils—toils so full of comfort for the present, and of promise for the future. And while we are thus blessed with delightful weather, let us embrace the occasion, to lay the ground work of good crops the ensuing year, so that each and all of us may have the consolation of knowing, that we have discharged our respective duties as farmers and planters, with integrity of purpose and fidelity of execution: and first of all, let us begin with

THE FARM.

This is a month when an immense quantity of labor must be performed on the farm, if you desire to reap a fruitful coming harvest. As your woods are now plentifully supplied with fallen leaves, gather them up together with the mould which has been formed by the decay of those of former years; haul the whole into your barn-yard, and if you have a stercory or manure house, deposit it therein; if you have no such convenience, spread it over your barn-yard to be trodden upon by your cattle during winter, and to act as a recipient to absorb their urine. In this way you may accumulate a body of manure equal to any demands which your corn and potato crops may make upon you, if manured in the drills. If, however, you should not have force at command to enable you to accomplish this, do not omit to procure and carefully stow away, where they will be protected from the weather, an ample supply of leaves for litter for your stalls through the winter: you will be thus enabled to save your straw for feed for your cattle, or for sale, and to realize infinitely more than the cost of collecting and hauling in the leaves.

If you would wish to save your *Apple orchard* from the ravages of the Canker worm, you must be up and adoining. The grubs or millers which lie snugly ensconced at the bottom and around the trees must be arrested. To do this effectually, dig the earth from around the trees to the distance of 5 or 6 feet from the trunks, put it up in piles and burn it thoroughly; sprinkle unslaked lime,

reduced to powder, around the surface of the roots from which you have scraped the earth. After the earth shall have been burned and cooled down, replace it, and you will thus effect two desirable objects: the action of the fire on the earth will have destroyed the canker worm in the first place, and, in the second, so meliorated the earth itself, as to be equal to a manuring. But if your trees are infested with this destructive insect, you must not stop here. Scrape the bark around the trunk, and encircle it with a list, or cloth, on which mercurial ointment has been spread.—Bandages of tar, and coal tar, have been also recommended; but as these require almost, if not daily, renewals, their efficacy is greatly jeopardized by the difficulty of making the requisite number of applications. The mercurial ointment possesses the advantage that a single one is sufficient: and in addition to these, if the trunk and limbs of the trees were washed with a solution of potash, much good would arise.

The *Apples* for winter keeping should be carefully collected and put away, and those for cider should be, as speedily as possible, put through the process, taking care before barreling up the liquid, to cleanse and sulphur your casks well.

If you have any cows that you expect to calve in a few weeks, be careful to give them, in addition to your dry food, good supplies of steamed or boiled roots, as potatoes, carrots, parsnips, beets, turnips, mangel wurtzel or ruta бага, with occasional mixtures of Rye slops, which latter, they should receive twice a day, at least three weeks before calving; and it would be all the better, if permitted to become acid before being given to them. If you have no fixture for steaming, have one put up, no matter how coarsely, it will answer; and take our word for it, if you have a dozen animals to feed, you will save its cost in a month. All your corn stalks, corn husks and straw, may, by the process of cooking, be converted into substances nearly as nutritive as the best timothy or clover hay, with this advantage, that one-third less will answer than when fed to them uncut and uncooked.

If you have any heifers near calving, as this is their first essay in the way of mothers, you should be especially careful with them; and be sure to give them good succulent messes of rye and meal slops, as well as generous allowances of steamed or boiled roots. Much depends upon your treatment of them now, whether they make good milch cows or not. If you desire they should be deep milkers, you must take the necessary steps, and use the proper means to ensure it. By giving them succulent slops, somewhat acidulated for some weeks prior to calving, you en-

courage the disposition in the animals to secrete milk, without endangering the birth of their young, by the accumulation of fat. And after they have calved and are well over it, the calf should be tied up. By this means, the *milk ducts, or vessels, will be distended and capacity and volume given to them, as well as to the udder of the cows.* The calves should be permitted to suck but three times a day, and if intended for veal, gruel made of Indian meal, occasionally of linseed meal, and force-balls, composed of meal and eggs, moistened with milk, should be given them. By permitting the calves to run with their mothers, they suck as their appetites may dictate, always leaving a portion of the milk unstript, and hence it is that cows imbibe the habit of *holding up*, a thing so provoking to the dairy-woman. Whereas if you tie the calves up, and let their mothers into them at regular stated hours, they go to the work of sucking with a keen and eager appetite, and as they know they have to make the most of their time, they tug at their mothers' teats until they yield them the last drop of milk which may have been secreted.

Your corn must be all husked and carefully stored away beyond the reach of rats and other vermin, and such part as you may design for sale, should be shelled out the first spare moment you have, in order that you may be ready to take it to market whenever the price may justify your selling.

When the period arrives for gathering your turnips and other late roots, do so without delay, and be prompt in placing them beyond the destructive influence of the frost and vermin.

In feeding roots to your stock, always use those first that are most perishable.

Attend to the condition of your fences; mend those that may require it, and put up new ones where you need them. Cut up the weeds in your fence corners, and if convenient to lime, make a compost consisting of weeds, mould and lime, in the proportion of $\frac{1}{2}$ mould, 3-8 weeds and 1-8 lime; treated thus, they will make excellent manure for use in the spring.

FALL PLOUGHING.—If you have any stiff soil that you intend for spring crops, plough it deeply, and throw your fallows in large slices, so as to leave as much of the newly turned up earth exposed as possible. If there be a tolerable vegetable carpet on it, a top dressing of *lime* will have a most salutary effect.

If you have any fields filled with that pest of farmers, *Garlic*, do not fail to plough them forthwith; let hands follow the plough with rakes, gather up the roots and burn them on the spot,

and repeat your ploughing during the winter.—By pursuing this course and cultivating them in spring and summer crops, which will require ploughing or hoeing frequently, you may in a year or two clear your lands of it.

If you design planting out *fruit, ornamental, or other trees*, now is the time; seize the first occasion to carry your intentions into operation. In selecting a site for an orchard, avoid valleys, low, and wet grounds.

With respect to the transplantation of fruit trees—now is the season for setting out *apples, pears, quinces, plums, cherries, peaches, nectarines, apricots, almonds, walnuts, filberts*, and, indeed, every other kind of hardy fruit trees.

KITCHEN GARDEN.

Thin out your spinach, corn-salad and winter cresses, and keep them free from weeds. The weeding should be done before the frosts set in.

Asparagus beds.—If you omitted dressing your asparagus beds last month, you must delay it no longer, but do it forthwith, as we then directed. Let your lettuce in frames have the advantage of free air every mild day, putting on the glasses again in the evening. Sow your small salading, of all kinds, on hot beds. Plant your *garlic, rocambole* and *shallots*. Your cabbage and cauliflower plants should be aired every good day to ensure them to stand the cold. Take the glasses off during the middle of each day, putting them on again at night. Before the hard frosts set in, take up and secure your cabbages.

Your late cauliflowers and Broccoli, which are producing their heads, should be attended to: break down some of the largest leaves, so as to cover and protect the flowers from the effects of the weather.

Your *turnips, carrots, parsnips, beets, salsify*, &c. must be gathered and put away securely.—Blanch, immediately, your *celery, cardoons* and *endives*. Sow your *rhubarb, kale*, and such other seeds as may be seasonable, not forgetting to weed your young *onions*.

Gooseberries, currants and raspberries, should be transplanted this month.

FLOWER GARDEN.

Your bulbous and tuberous roots, of almost all descriptions should be set out this month, the earlier the better, as it is desirable that they should take root before the hard frosts set in.—Previous to which a good covering of half decayed tanner's bark, leaves and well rotted manure should be spread over the beds, and the alleys and sides should be protected by long manure, or straw.

Tuberose, Dahlias, Tigridias and *Amaryllis*,

as soon as the frost has injured their foliage, should be taken up, dried thoroughly in the sun, or in a room where there is a fire. When perfectly dry, pack them in boxes, in dry sand or moss, previously divesting them of their foliage and fibres, and store them away in a warm room or dry cellar, where they will at all times be exempt from frosts. For your *Primroses, Polyanthus* and *Daises*, which were planted last month, have a frame in readiness, to protect them through the winter: they should also have a slight covering of leaves.

Choice *Pinks, Carnations* and *Auriculas*, which are in pots should be placed in the frame intended to preserve them during the winter. The pots should be sunk in tan, half decayed leaves or saw dust, up to their rims. During severe weather, and, indeed, throughout the winter, the glasses should be covered, except through the middle of the day, with matting or plaited straw.

Cleanse your garden of all weeds, and remove the fallen leaves from your walks, taking care to put the whole upon your manure heap, where they must be covered over with earth.

In conclusion, we would observe, that the prudent agriculturists, horticulturists, and florists, must keep their eyes open, their judgment fresh and unclouded, and their energy, industry and resolution always unimpaired, and ready for exertion, whenever and wherever they may be required, whether on the plantation, or in the kitchen or flower garden.

ON STEAMING FOOD FOR HORSES.

"It has been ascertained, though perhaps not generally known, that *grain of any kind cannot be dressed or cooked by dry steam applied to the dry grain*. If the steam is at a low pressure, or a little above that of atmospheric, a species of parching is produced on the grain so treated; and if steam of a very light pressure is applied, the grain may be entirely carbonized. An intermediate and very simple process, has however been found, whereby grain of any sort can be completely boiled, which is done by *soaking* the grain in water for a period of from six to twelve hours, according to its state of dryness; and then placing it in the receiver described for steaming roots, and applying steam for an hour, the grain will come out completely boiled. From this it may be inferred, that each grain becomes a little cauldron, containing as much absorbed water as serves to boil it by the application of steam; but whatever be the *rationale* of it, we are thus provided with a simple and efficient steaming and boiling apparatus, applicable alike to the cooking of juicy roots or tubers, and dry grains.

That horses on a farm may be kept more economically on prepared food than in the state and manner in which food is usually administered to them, we have no doubt. The fact, however, will soon be ascertained in consequence of the

premium which the Highland Society has just now announced on the subject. The results of the experiments which some farmers will make, will, we fondly anticipate, prove the facility of preparing food, and economy in the use of it.—We have the authority of the owners of some of the coaching and posting establishments in Edinburgh, for stating that the saving which will arise from the use of prepared food, in the keep of forty horses, will amount to 140*l.* a year. We have also the high authority of Mr. Dick, the Professor of Veterinary Surgery in Edinburgh, for saying that *the general health of horses under work, is much better on prepared than unprepared food.*

‘It will appear obvious,’ says Mr. Dick, ‘that the grand desideratum is to give food containing as much nutriment, and in as small bulk, as it is consistent with the economy of the animal. If this problem is solved, it will follow, as a corollary, that it will be important to give that food which has been found best suited to its proportions, in such a state as is best suited for digestion. This is a point, however, worthy of consideration; and naturally suggests the question, how is the body supplied with nourishment by taking in food into the stomach? The common notion is, that much depends, as I have indeed before mentioned, on the hardness of the food; and it is a common saying, in order to show off a horse which is in a good condition, ‘that he has plenty of hard meat in him.’ Now this is a very silly and erroneous idea, if we inquire into it; for, whatever may be the consistency of the food which is taken into the stomach, it must, before the body can possibly derive any substantial support or benefit from it, be converted into chyme—a pulaceous mass; and this as it passes onwards from the stomach into the intestinal canal, is rendered still more fluid by the admixture of the secretions from the stomach, the liver and the pancreas, when it becomes of a milky appearance, and is called chyle. It is then taken into the system by the lacteals; and in this fluid, this soft state, and in this state only, mixes with the blood, and passes through the circulating vessels for the nourishment of the system.

‘Now if the hardest of the food must in this manner be broken down and dissolved before it can really enter into the system, it must appear evident that something approaching to this solution, if done artificially, would greatly aid the organs of digestion in this process, and that thereby much exertion might be saved to the system, and at the same time nourishment would be rapidly conveyed into it. It is with this view that I would recommend the general adoption of cooking food for horses.’

SUGAR CROP IN LOUISIANA.

The editor of the Baltimore Chronicle is indebted to the politeness of a commercial house in this city for the following extract of a letter from a respectable planter in Louisiana:

‘As I previously mentioned, the Sugar crop is very short. Many planters wont make a hhd. and if they make seed for the coming year, it will be the extent. I expect to make $\frac{1}{2}$ of a crop.—Contracts have been made here at $7\frac{1}{2}$ to $8\frac{3}{4}$, and now I believe \$9 could be got. It is generally thought 30,000 hhds. will not be made in the

State. Several of our grocers who have had nerve, have made \$20 to 30 a hhd. on sugar, and are selling old sugar at \$9 $\frac{1}{2}$ to 10. You may rely on the correctness of this information.’

ON THE USE OF LIME AS A MANURE.

By M. PUVIS.

Translated for the Farmers’ Register from the *Annales de l’Agriculture Francaise*, of 1835.

[The publication of the following communication to the *Annales de l’Agriculture Francaise*, was commenced in the February No. of that journal, (which was received here in May,) and the June No. contains the end of the first part, “On Liming,” and enables us to offer the translation of that portion to our readers. Only a few pages of the next proportion of the series, “On marling,” has yet appeared, and not enough to permit a judgment to be formed of its worth.

Though there are many deficiencies in this treatise on liming—and also opinions as to the theory of the action of lime, in which we cannot coincide—still, on the whole, we consider it as presenting far more correct views, and more satisfactory information, both on theory and practice, than any other work on liming that we have before seen. In other points, and those of most importance, the facts here presented, (and now first learned from any European authority,) strongly sustain the views maintained in the *Essay on Calcareous Manures*. It would be both unnecessary and obtrusive to remind the reader of these points of difference, and of agreement, whenever passages exhibiting either may occur. They will therefore generally be submitted in the author’s words, without comment. A few exceptions only to this rule will be made, in cases which appear particularly to call for them.

We have no information whatever of M. Puviss, the author of this treatise, previous to the appearance of the commencement of the publication in the *Annales*. But he is evidently well informed on this subject, and is stated by the introductory remarks of the French editor, to be entitled to all respect, for his long experience, and his practical, as well as scientific investigation of the subject. If then there remains no ground to distrust his judgment or his facts, the statements made are most important to a very large portion of this country, which has heretofore been generally supposed to be deprived of all possible benefit from the use of calcareous manures, on account of their remoteness and high price of carriage. M. Puviss states that the most successful and profitable liming in Europe (for the expense incurred) is in repeated applications of very small dressings—making less on the average, than four bushels of lime to the acre, annually. This small amount, if really as efficacious as is alleged, would cost so little in labor and money, that the limits of the region capable of being limed may be very far extended. It would not matter though the applications should require to be repeated forever, provided the annual returns gave good profit upon the annual expense: and far greater will be the profit if (as we think) the soil ultimately will no longer require such repetitions—or only at very distant intervals of time—and still be a highly productive, because it has been made a calcareous and fertile soil. *Ed. Far. Reg.]*

On the different modes of improving the soil.

To improve the soil is to modify its composition in such manner as to render it more fertile.

This definition, which might be extended to manures charged with vegetable mould [*humus*] or animal substances, which also modify the composition of the soil, is limited by French agriculture to substances which act upon the soil, or upon plants, without containing any notable proportion of animal or vegetable matter.

It is said that manures, [putrescent or enriching,] serve for the nutriment of plants. But it is the same as to substances improving to the soil, which furnish to it matters which it needs to be fruitful, and which furnish to vegetables, the earths and saline compounds which enter as essential elements in their composition, their texture, and their products. Such improving substances ought well to be regarded as nutritive.*

Thus lime, marl, and all the calcareous compounds employed in agriculture, since they furnish lime and its compounds, which sometimes form half of the fixed principles of vegetables, ought also to be considered as aliments; or, what comes to the same, as furnishing a part of the substance of vegetables. Thus again, wood-ashes, pounded bones, burnt bones, which furnish to vegetation the calcareous and saline phosphates which compose a sixth of the fixed principles of the stalks, and three-fourths of their seeds, ought well to be considered, and surely are, nutritive.

What then particularly marks the distinction between manures which improves the soil [*amendemens*,] and alimentary manures, [*engrais*,] is, that the former furnish, for the greater part, the fixed principles of vegetables, the earths, and salts, which are not met with ready formed, neither in the soil nor in the atmosphere: while alimentary manures furnish a small part of the volatile principles which are abundantly diffused throughout the atmosphere, whence vegetables draw them, by means of suitable organs: and what is most remarkable, is, that the vegetables, by receiving the fixed principles of which it has need, acquires, as we shall see, a greater energy to gather for its sustenance the volatile principles which the atmosphere contains.

The greater part then of soils, to be carried to

*The two classes of manures which are described generally above, are conveniently designated in French each by a single word. “*Engrais*,” which we can only translate as *manure*, is limited in signification to such substances as directly enrich soils, and feed growing plants—and “*amendemens*,” signifying substances which alter and improve the constitution, texture, and indirectly, the fertility of soil, but the operation of which is not to furnish food to plants. In speaking of the action of these different classes, the sense may be rendered, though not very precisely, by the words “enrich,” and “improve”—but there is no one English term that will convey the meaning of either class of substances. “Alimentary manures” will be used for the first class, and “manures improving the constitution of soil,” or some similar awkward, but descriptive phrase, can only render the meaning of the word “amendemens”—useless “improves” could be tolerated as a substitute, for convenience. *Tr.*

the highest rate of productiveness, require manures to improve their constitution. Alimentary manures give much vigor to the leafy products—but they multiply weeds, both by favoring their growth and conveying their seed—and they often cause crops [of small grain] to be lodged, when they are heavy. Manures which improve the soil, more particularly aid the formation of the seeds, give more solidity to the stalks, and prevent the falling of the plants. But it is in the simultaneous employment of these two means of fertilization by which we give to the soil all the active power of which it is susceptible. They are necessary to each other, doubling their action reciprocally: and whenever they are employed together, fertility goes on without ceasing—increasing instead of diminishing.

The greater part of improving substances are calcareous compounds. Their effect is decided upon all soils which do not contain lime, and we shall see that three-fourths, perhaps, of the lands of France are in that state. The soils not calcareous, whatever may be their culture, and whatever may be the quantity of manure lavished on them, are not suitable for all products—are often cold and moist, and are covered with weeds.—Calcareous manures, by giving the lime which is wanting in such soils, complete their advantages, render the tillage more easy, destroy the weeds, and fit the soil for all products.

The improving substances have been called *stimulants*; they have been thus designated because it was believed that their effect consisted only in stimulating the soil and the plants. This designation is faulty, because it would place these substances in a false point of view. It would make it seem that they brought nothing to the soil, nor to plants—and yet their principal effect is to give both principles which is wanting. Thus the main effect of calcareous manures proceeds from their giving, on the one hand, to the soil the calcareous principle which it does not contain, and which is necessary to be able to develop its full action on the atmosphere—and on the other hand, to vegetables, the quantity which they require of this principle, for their frame-work and their intimate constitution. It would then be a better definition than that above, to say that to improve the soil is to give to it the principles which it requires, and does not contain.

Importance of manures which improve the constitution of soils.

The question of improving manure is of great interest to agriculture. This means of meliorating the soil is too little known, and above all, too little practised in great part of France—and yet it is a condition absolutely necessary to the agricultural prosperity of a country. In the neighborhood of great cities, alimentary manures being furnished on good terms, may well vivify the soil: but animal manure cannot suffice but in a few situations, and of small extent—and in every country where tillage is highly prosperous, improving manures are in use. The department of the North (of France,) Belgium, and England, owe to them, in a great measure, their prosperity. The Department of the North, (which is, of all Europe, the country where agriculture is best practised, and the most productive,) spends every year, upon two-thirds of its soil, a million of francs in lime, marl, ashes of peat, and of dead coal [hou-

elle;*] and it is principally to these agents, and not to quality of the soils, that the superiority of its production is owing. The best of its soil makes part of the same basin, is of the same formation, and same quality, as a great part of Artois and Picardy, of which the products are scarcely equal to half the rate of the North. Neither is it the quantity of meadow land which causes its superiority; that makes but the fifth part of its extent, and Lille, the best *Arrondissement*, has scarcely a twentieth of its surface in meadow, while Avesne, the worst of all, has one-third. Nor can any great additional value be attributed to the artificial meadows, since they are not met with except in the twenty-sixth part of the wholespace. Neither can this honor be due to the suppression of naked fallow, since in this country of pattern husbandry, they yet take up one-sixth of the ploughed land, every year. Finally, the Flemings have but one head of large cattle for every two hectares† of land, a proportion exceeded in a great part of France. Their great products then are due to their excellent economy and use of manures, to the assiduous labor of the farmers, to courses of crops well arranged, but, above all, we think, to the improvers of soil, which they join to their alimentary manures. Two-thirds of their land receive these regularly: and it is to the reciprocal reaction of these two agents of melioration, that appears to be due the uninterrupted succession of fecundity, which astonishes all those who are not accustomed continually to see the products of this region.

At this moment, upon all points in France, agriculture, after the example of the other arts of industry, is bringing forth improvements; in all parts especially, cultivators are trying, or wishing to try, lime, marl, ashes, animal black. It is this particular point in progress, above all, for which light is wanting; and this opinion has induced the preparation of this publication. Since more than 30 years, the author has devoted himself, from inclination, to agriculture; but he has been especially attentive to calcareous manures. He has studied in the practice of much extent of country, in his own particularly, in personal experiments, and in what has been written on them both by foreigners and countrymen. An *Essay on Marl*‡ has been the first fruit of his labours; an *Essay on the use of lime* will soon be ready; it is with these materials that he now sets himself to work. To prepare for this object, a series of articles, of the nature of a recapitulation rather than of a regular

*Statique du departement du Nord.

†The hectare is very nearly equal to two and a half English (or American) acres. See account of French weights and Measures, p. 506, Vol. II. Farm. Reg.—Tr.

‡*Essai sur la marne*, published 1826, at Paris. This is the first notice which we have had of the existence of this work, and have forthwith sent for a copy, as well as for one of the author's forthcoming *Essay on the use of lime*, that no source of information on this important subject may be excluded. But it may be inferred (from the author's expressions,) that these more extended works will contain nothing more of what is essential, than is presented in this condensed form, prepared by himself for the *Annales*. ED. FARMERS' REC.

work, it was necessary to be concise, and yet not to omit any thing essential. It is proper then that he should limit himself to the prominent parts of his subject, those especially useful to practice. His advice will then be as often empirical as regular, and his directions will be precise, although supported by a few developements.

An extract from this work has appeared in the *Encyclopedie Agricole*: here it will again appear, but by separate articles, which will be corrected by a systematic general view of theory, founded on practice. This is the moment for multiplying publications on this subject, because that in almost all parts of France, it is the point in agriculture most controverted—that which induces the most labor and the greatest expenditures—which presents most doubts—and which has consequently most need of being made clear.

We shall not enlarge here upon the manner in which improving manures act: we will put off this important question, with its developments to the article on lime. Here we only present the theory. Hereafter, that which we will hazard will be founded upon facts, and yet we will not promise these developments, but for the purpose of enlightening and directing practice.

Of the various kinds of improving manures.

The first in order, and the most important, are the calcareous manures. We comprehend under this name, lime, marl, old plastering mortar, and other rubbish of demolished buildings, beds of fossil shells, [*falun*]* or shelly substances, plaster or gypsum, experience and reason will prove that we ought to arrange in the same class, and by side of the others, wood ashes, ground bones, and burnt bones. We will not place in the same list the ashes of peat, of dead coal, and red pyritous ashes: their effect is not owing to their lime, but (as will be seen afterwards) rather to the effect of fire upon the earthy parts, and particularly upon the argil which they contain.

We will next in order treat of manures of the sea, of saline manures of different kinds of mixtures of earths, of calcined clay: and finally, of paring and burning the turf, and the different questions which peat presents in agriculture.

Of liming—on the use of lime for the improvement of soil.

1. Among the immense variety of substances, and of combinations which compose the upper layers of the globe, the earthy substances, silice, alumine, and lime, form almost exclusively the surface soil: the greater portion of other substances being unfit to aid vegetation, they ought to be very rare upon a surface where the supreme author willed to call forth and to preserve the millions of species of beings of all nature which live on its products.

It was also a great benefit to man, whose intelligence was to be exercised upon the surface of the soil, to have so few in number the substances

**Falun*—Beds formed by shells. There is one of these immense beds in Touraine. The cultivators of that country use this shelly earth to improve their fields." This definition is from Rozier's *Cours Complet*, and though it clearly shows that the substance in question is the same as what is called "marl" in Virginia, it is equally clear that neither of these authors consider *falun* as being marl. Tr.

proper to support vegetation. The art of agriculture, already so complex, which receives from so many circumstance such diverse modifications, if there had been added new elements much more complicated, would have been above the reach of human intelligence.

2. But among these substances, the two first, silix and alumine, form almost exclusively three-fourths of soil; the third, the carbonate of lime, is found more or less mixed in the other fourth: all soils in which the latter earth is found, have similar characters, producing certain families of vegetables which cannot succeed in those in which it is not contained.

The calcareous elements seem to be in the soil a means and a principle of friability. Soils which contain calcareous earth in suitable proportions, suffer but little from moisture, and let pass easily, to the lower beds, the superabundant water, and consequently drain themselves with facility.—Grain and leguminous crops, the oleaginous plants, and the greater part of the vegetables of commerce, succeed well on these soils.

It is among these soils that almost all good lands are found. Nevertheless, the abundance of the calcareous principle is more often injurious than useful. Thus it is among soils composed principally of carbonate of lime that we meet with the most arid and barren, as Lousy Champagne, part of Yonne, and some parts of Berry.

3. The analysis of the best soils has shown that they rarely contain beyond 10 per cent. of the carbonate of lime; and those of the highest grade of quality seem to contain but from 3 to 5 per cent. Thus the analyses of Messrs. Berthier and Drapiez, show 3 per cent. of it in the celebrated soil of the environs of Lille.

4. But all these proportions, all these advantages, all these products, calcareous manures bear with them to the soils which do not contain the calcareous principle. It is sufficient to spread them in very small proportions: a quantity of lime which does not exceed the thousandth part of the tilled surface layer of soil, a like proportion of drawn ashes, or a two-hundredth part (or even less) of marl, are sufficient to modify the nature, change the products, and increase by one-half the crops of a soil destitute of the calcareous principle. This principle then is necessary to be furnished to those soils which do not contain it; it is then a kind of condiment disposed by nature to meliorate poor soils, and to give them fertility.

Ancient date of the use of lime.

5. Lime, as it appears, has long ago been used in many countries. However, nothing proves that its effect was well known to the Greeks and Romans, the then civilized portion of mankind.—Their old agricultural writers do not speak of the use of lime on cultivated lands, nor on meadows. Pliny, the naturalist, tells us however, that it was in use for vines, for olives, and for cherry trees, the fruit of which it made more forward: and he speaks of its being used on the soil generally in two provinces of Gaul, those of the Pictones and *Ædui*,* whose fields lime rendered more fruitful. The agriculture of the barbarians was then, in this particular, more advanced than that of the Romans. After that, all trace of the use of lime in agriculture, is lost for a long time—whether

that it had ceased to be used, or only that the notice of it was omitted by writers on agriculture. The trace is again recovered with Bernard Pallissy, who recommends the use of it in compost in moist lands, and speaks of his use of it in the Ardennes. Nearly a century later, Olivier de Serres,† advises its employment in the same manner, and reports that they made use of it in the provinces of Gueldres and Juliers [in Belgium.] He makes no mention of its use in France: but as the practices of agriculture were not then much brought together, and were but little known, it may be believed that at that time, Flanders, Belgium, and Normandy, made use of lime.

In England, liming seems to have been in use earlier and more generally than in France. But then, and in all time since, good agricultural practices have remained in the particular countries where they were established, without being spread abroad. Now, novelties carry no alarm with them—and in the last twenty years, liming has made more progress than in the two preceding centuries.

Of soils suitable for liming.

6. Lime, as it has been said before, suits the soils which do not contain it already. To distinguish these soils from others, chemical analysis is, without doubt, the surest means; but it offers often too many difficulties, and lime may be met with in a soil in proportion great enough to exert its power on vegetation, without producing effervescence with acids.‡ But visible characters may furnish indications almost certain. The soils where the cow wheat [*melampyre*,] rest-harrow, [*Ponouis*, ou *arrete-bœuf*,] thistles, colt's foot, [*tussilage*,] and red poppy, spring spontaneously—which produce well in wheat, legumes, (or plants of the pea kind,) and especially sainfoin—where the chestnut succeeds badly—which shows but little of dogstooth, [*chiendent*,] volunteer grasses, or common weeds, [*graminees adventices*,] except of the small leguminous kinds—soils which after being dry, crumble with the first rain—all these are almost certainly calcareous, have no need of lime, nor its compounds,* and would feel from their use, rather ill than good effects.

On the contrary, all soils composed of the moulderings [*debris*] of granite or schistus, almost all sandy soils, those which are moist and cold of the immense argilo-silicious table lands [*plateaux argilo-silicieux*] which separate the basins of great rivers§—the ground where the fern,

† Who wrote on agriculture in the reign of Henry IV. of France. *Tr.*

‡ This is a full though indirect admission of the truth of the doctrine of *neutral soils*, maintained in the Essay on Calcareous Manures. *Tr.*

* Though both the truth and the usefulness of this passage, in general, are admitted, yet it is incorrect, in the position that none of the "compounds of lime" would be advantageously employed on calcareous soils. On the contrary, the sulphate of lime (gypsum) the most important compound as a manure, next to the carbonate, is most effective where the land has lime in some other form: and indeed (as has been maintained elsewhere) it seems generally inert and useless on soils very deficient in lime.—*Essay on Calcareous Manures*, pp. 50, 92.

the little rush [*petit ajone*] the health, *les petits carex blancs*, the whitish moss spring spontaneously—almost all the soils infested with *avoins à chapelets*, with dogs-tooth, with bent grass [*agrostis*,] red sorrel, and the little feverfew—that soil where, unless so clayey as to offer great difficulty to cultivation, only rye, potatoes, and buckwheat, can be made, and where sainfoin and the greater part of the crops of commerce cannot succeed—where, however, trees of all kinds, and especially the resinous kinds, the wood-pine, the sea-pine, the larch, the northern pine, and the chestnut, thrive better than in the best land—all these soils are without the calcareous principle, and all the improving manures in which it is found, would give to these the qualities of, and nourish the growths peculiar to calcareous soils.

But there, more than elsewhere, it is especially necessary to avoid too much haste. Liming upon a great scale, ought not to be done, until after having succeeded in small experiments on many different parts of the ground designed to be improved.

(To be continued.)

¶ The character of the lands called by the author "*plateaux argilo-silicieux*," and which he refers to frequently in the course of his essay, can only be gathered from the context. They are poor, intractable under tillage, and but little pervious to water. The name indicates their composition to be silicious and aluminous earth almost entirely. It may be inferred that such lands resemble in soil the elevated level *ridges* which in lower Virginia separate different water courses, and especially those which in addition to being miserably poor, are remarkably close, stiff, and "water-holding"—and are in some places called "cold livery land," "pipe-clay," or "cray-fish" soils. Soil of this kind, and of the most marked character, is particularly described at page 40, *Essay on Calcareous Manures*, 2d ed. M. Puvis elsewhere, speaks of this "*argilo-silicieux*" soil as being found every where in France, and as known in different places under the various names of "terrain blanc," "blanche terre," in the south, "boulbenne," in the north, of "terre clytre," and "terre a bois"—and in the basin of the Loire, "*terre de Sologne*." The last name would direct us to the lands of Sologne, which furnish it, as it may be presumed, as being of like quality. Arthur Young says "Sologne is one of the poorest and most unimproved provinces of the kingdom, and one of the most singular countries I have seen. It is flat, consisting of a poor sand or gravel, every where on a clay or marl bottom, retentive of water to such a degree that every ditch and hole was full of it." *Tr.*

MARYLAND HORTICULTURAL SOCIETY, SATURDAY, Oct. 31st, 1835.

The following articles were exhibited, viz:

By Mrs. Philip Littig, 3 very large Radishes.

By H. B. Chew, specimens of Celery and green Peas.

By Mrs. John Lester, 4 fine Beets.

By Mr. James Howard, a sample of very fine potatoes.

By Mr. Valentine, 3 fine Cape Broccoli.

By Dr. James T. Johnson, of Frederick, a very large Radish.

* *Ædui et Pictones calce uberrimos fecere agros.*

By Wm. Jessup, of Baltimore county, a peck of very fine Potatoes and 4 Radishes.

By Samuel Feast, a specimen of fruit of the Bourbon Strawberry.

By Joseph King, Jr., 22 varieties of Chrysanthemums.

By Mrs. Geo. H. Keerl, 27 varieties of Chrysanthemums.

By Miss —, a fine bouquet of Chrysanthemums.

By Mrs. Hugh Birkhead, a fine bouquet of Chrysanthemums.

By Mrs. Robert A. Taylor, specimens of Chrysanthemums.

By Mr. Edward Kurtz, 22 varieties of Chrysanthemums.

By Mr. John Feast, the crimson daisy flowered Chrysanthemums, a new variety.

At 12 o'clock, the Committee awarded the weekly premium to Mr. Valentine, for his fine Cape Brocoli. GIDEON B. SMITH,
Cor. Sec'y.

ADVICE TO FARMERS.

Farmers, take care not to send your corn to market too early this fall—wait, and let it get thoroughly dry, about the middle of December. In the first place, you will by this escape the probable damage to your corn, and the certain loss in the price. Some new corn has already been sent up in the ear, which has been in a bad state. There is scarcely a bushel of old corn to go up, and to supply the place of old corn, you must have the new in a very dry state; it will bring you a much better price, for it will be worth more; besides new corn is worth a great deal more in December than in the month of November. Farmers generally complain of the unusually green state of their corn* at this season, and of their disappointment in the crops not coming up to expectation.

Easton (Md.) Gaz.

[*We have heard of corn growing in the ear on the stalk in an adjoining county. Ed. Far. and Gard.]

FOREIGN ABSTRACT.

Advices to the 8th of October have been received from Europe. There is but little of interest from any part of the continent of Europe to notice. O'Connell has returned from Scotland to Ireland, having pronounced a violent phillippic against the Americans, on account of the existence of slavery among us; he denounced them as "traitors to the cause of human liberty," before the society of venerable old ladies who deputed the hiring Thompson to come here and cast his firebrand among us. For ourself we disregard what such hired patriots either say or think of us; he has already taxed his countrymen £80,000 for his patriotism! The affairs of Spain appear to be mending, and those of France are as quiet as a volcano immediately preceding its outbreak.

From the correspondent of the N. Y. Daily Advertiser—Liverpool, 8th Oct. 1835—The sales of Cotton for the week ending on the 2d instant, were only 11,520 bags, viz:

6110 Upland at 7½a11½; 6350 Orleans 7a12½; 2120 Alabama 7-7-8a11½; 80 Sea Island 33a36; 1160 Brazil 11½a14; 280 Egyptian 14a16½; 510 East India 6½a8½; 190 W. India 14½a15½. Total 16,800 bags.

Later by two days.—Money continues scarce in London. Toreno had been ejected from the Spanish ministry, and Mendizabel had taken his place. The former had rendered himself very unpopular with the liberal party, and given rise by his hostility to free principles to the disaffection which had recently manifested itself: the latter is decidedly a favorite, and his appointment had reconciled the friends of the Cortes; the jontos had already sent in their adhesion, and a new era had already beamed upon Spain.

Errata.—We regret the occurrence of the following errors, which occurred in the communication of our highly esteemed correspondent Melibæus, published in our 24th number, and now recur to them with a view of correcting them, as a matter of justice to the enlightened author of that excellent essay, not that we are at all apprehensive they will be ascribed to him by the critical reader; for the printer rightfully bears all such sins; but merely make them to guard the writer from even the possible imputation of inattention to the more rigid rules of syntax; for no one capable of appreciating the grasp and power of thought contained in the essay would dream of any thing else.

In the 5th line from the top of the first column, page 188, after the word "tried," insert "it."

In the 19th line, same column, for "ideas" read "idea."

In the 32d line, same column, between the words "last century," insert "half," so as to read "last half century."

In the 7th line from the bottom, same column, for "29th March," read "31st March."

In the 23d line from the top, in the 3d column, same page, the sentence beginning thus: "If such a principle had influence, generally the determinations of man"—should read, "If such a principle had influenced generally the determinations of man," &c.

In the first column, p. 189, 28th line from the top, strike out the word "in" after the word "interest," and insert, "on."

In the 2d column, same page, 9th line, after the word "topics" insert the word "on."

CONTENTS OF THIS NUMBER.

Annunciation of the publication of the Silk Manual—utility of corn shellers and straw cutters—the blight in fruit trees—a rich specimen of marl from North Carolina—great produce of rye—work for November—value of steamed food for horses—sugar crop in Louisiana—on the use of lime as a manure—proceedings of the Md. Horticultural Society—advice to farmers—foreign abstract—errata—advertisements—prices currents, &c.

STOCK OF IMPROVED SHORT HORN DURHAMS.

THE editor of the Farmer and Gardener, Baltimore, has for sale two 7-8 and four 3-4 bred cows, 2 full bred and seven 7-8 bred bulls of the improved short-horn breed. They are all fine animals whether regard be had to their milking or fattening propensities. Their pedigrees are indisputable, all tracing to the British Herd book. They will be sold low for cash, their excellence being considered.—To any person, company, or society, who may want several, a great bargain would be given.

Letters addressed to the editor upon this subject, must be post paid. nov 10 4t

Printed by Sands & Neilson, N. E. corner of Charles and Market streets.

BANK NTOE TABLE.	
Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.	
U. S. Bank,.....par	VIRGINIA.
Branch at Baltimore,....do	Farmers Bank of Virginia 2½a
Other Branches,.....do	Bank of Virginia,.....do
MARYLAND.	
Banks in Baltimore,....par	Branch at Fredericksburg,do
Hagerstown,.....½a	Petersburg,.....do
Frederick,.....do	Norfolk,.....do
Westminster,.....do	Winchester,.....do
Farmers' Bank of Mary'd,do	Lynchburg,.....do
Do. payable at Easton,....do	Danville,.....do
Salisbury,.....5 per ct. dis.	Bank of the Valley,....do
Cumberland,.....½a	Branch at Romney,....½
Millington,.....do	Do. Charlestown,....do
DISTRICT.	
Washington, } Banks, ½.	Do. Leesburg,.....do
Georgetown, } Banks, ½.	Wheeling Banks,.....1½a2
Alexandria, } Banks, ½.	Ohio Banks, generally 2½a3
PENNSYLVANIA.	
Philadelphia,.....½a	New Jersey Banks gen. 1½a2
Chambersburg,.....½a	New York City,.....½a
Gettysburg,.....do	New York State,....2½a3
Pittsburg,.....1½a2	Massachusetts,.....2a2½
York,.....½a	Connecticut,.....2a2½
Other Pennsylvania Bks. 1½a2	New Hampshire,....2a2½
Delaware [under \$5]....3a4	Maine,.....2a2½
Do. [over 5].....½a2	Rhode Island,.....2a2½
Michigan Banks,.....5a	North Carolina,....2½a3
Canadian do.....5a	South Carolina,....2½a3
	Georgia,.....3a3½
	New Orleans,.....4

BALTIMORE PROVISION MARKET.			
	PER.	FROM.	TO.
APPLES,.....	barrel.		
BACON, hams, new, Balt. cured....	pound.	11	
Shoulders,....do.....	"	10	
Middlings,....do.....	"	8½	9
Assorted, country,....	"	7	8
BUTTER, printed, in lbs. & half lbs.	"	18½	25
Roll,.....do.....	"	20	
CIDER,.....	barrel.		
CALVES, three to six weeks old....	each.	3 00	6 00
Cows, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 75	2 00
CHOP RYE,.....	"	1 62½	1 75
EGGS,.....	dozen.		
FISH, Shad, No. 1, Susquehanna, barrel.		7 75	
No. 2,.....		6 75	
Herrings, salted, No. 1,.....	"	4 00	4 12½
Mackerel, No. 3,.....	"	5 75	
Cod, salted,.....	cwt.	3 00	35 0
LARD,.....	pound.	10	10

DEVON STOCK.

THE editor of the Farmer and Gardener can at all times supply orders for Devon Cattle. This breed is so distinguished for their easy keep and docility; the richness of the milk, of the cows, and for the activity and sprightliness of the oxen that they would be admirably suited to the purposes of southern agriculturists.

Any person wishing to procure them can be supplied by addressing a letter post paid to the editor of the Farmer and Gardener. nov 10 4t

FOR SALE,

THREE fine young bulls—the one 3 years old, and the other two, two years old, each. These animals are crosses of the Improved Short-horn Durham, and Alderney breeds, and would be valuable acquisitions to any gentlemen wishing to breed either for the dairy or for beef, as the progeny of such crosses, combine in an eminent degree both the qualities of taking on fat, and of yielding copious supplies of milk.

For prices, enquire of the editor of the Farmer and Gardener. Terms, cash. nov 3 3t

LEON.

THE splendid bull LEON, is now at Clairmont Nursery, where he will remain a few weeks. He is a full blooded improved Durham short horn, and allowed to be one of the best bred animals in the country. He will serve Cows at \$5 each. He is milk white, with a hicc as glossy and soft as satin. For his pedigree, see the advertisement, in which he is offered for sale in this day's paper. no 3

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 29.

BALTIMORE, MD. NOVEMBER 17, 1835.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**,

and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, NOV. 17, 1835.

Our *Silk Manual* is now before the public, and thus far the demand for it has more than realized our most sanguine expectations. In its compilation we have endeavored to aim at *fidelity*; that is the only merit we lay claim to, and if the public should adjudge us that meed, our ambition will be more than gratified. We have believed for years that there was no part of husbandry, to which the agriculturists could turn their attention, that promised any thing like the same fruitful results. Thus impressed, we were induced to undertake the compilation of our little work, and the belief that it was calculated to exercise a great moral and political influence, animated us throughout in the discharge of our labors. These, as the reader will readily believe, have been arduous. On a subject like that of the *Silk Culture*, where so much have been written—where so many philosophical speculations have been advanced, and where so much mystery have been thrown around a branch of industry simple in itself, the task of separating the *practicable* from the *impracticable*, could not be expected to be without its difficulties. We believed from the beginning, that what the public interest demanded, was a *plain, practical set of instructions*, which could be followed, without the least embarrassment, by any one of ordinary intelligence, who might desire to enter into it, either as a *branch* of his system of husbandry, or as a *separate* and distinct business. For years we had looked on with unmixed feelings of pain at the low rate of female wages, and the precarious nature of their employment. In the large and populous cities where labor so abounds, we had seen it almost impossible for the widowed mother to earn by her needle, or indeed, by any other creditable employment, a living for herself and her offspring—and in the country, when the head of a poor family was taken off, we had noticed, that a life of abject penury—of bitter want—was

sure to follow in the train of concomitant evils; and without the ascription to ourself of any superabundant quantum of the “milk of human kindness,” we must be permitted, in sober truth, to observe, that we have not viewed these things unmoved. And if, in our feeble advocacy of this arm of agriculture, we shall contribute, in the least, towards the melioration of the condition of this interesting and helpless description of our fellow beings, we shall consider that we have been most fortunate, indeed; and should we by any thing we may have said, or may say, upon the subject, be instrumental in promoting the popularity of the culture, it will be to us as we shall pass down the course of time, at once the cause of solace and of hope.

The business of cultivating the mulberry is as simple as the planting of any other tree, and the whole art of hatching, raising and feeding silk worms, is so easy, that an intelligent child of seven years of age, would prove as successful an attendant as a sage philosopher—it entirely consists in *regularity of feeding, and keeping the apartment clean*. And as to *reeling* the cocoons, the necessary tact for executing that can be learned in a few hours, by any woman who can reel either cotton, thread, or woollen yarn. As we recommend in our *Manual*, we advise here, that every person planting a mulberry orchard, should without delay, procure a few hundred eggs, and commence the good work on a small scale. If he has no native or other mulberries growing on his place, he may sow a few seed in a rich, warmly exposed border, rough cast, to feed his worms the first year, and from those he may have sown for his orchard, he may in subsequent years, gather sufficient leaves, without injury to the plants, until they are old enough to be fed from, generally, to sustain his worms. We intend this as a *school*, and we take leave here to assure every one who may desire to go into the business, that by following our advice in this respect, by the time the mulberry is fit for stripping, that he and his household will have become adepts in the art of raising worms and making silk.

We desire now to have a kind of fire side talk with every farmer, in the country.

“Have you any poor land that barely pays you for ploughing?”

“Yes. I have fields that hardly bring me a return of seed, and others that, with all the manure I can raise, will not more than average six bushels of wheat to the acre.”

“Well then, suppose we were to tell you that those same fields, if they lay high, are dry, and are of a sandy or gravelly soil, may be made to yield you with a very small portion of manure, in four or five years, rising *five hundred dollars, annually, per acre*—we say, if we were to tell you that, would you believe us?”

“We confess such a statement would be a heavy tax upon our credulity. How could it be done?”

“Why an acre of ground planted in Mulberry, the rows 6 feet apart, the plants $1\frac{1}{2}$ feet asunder, will, in four years, raise foliage enough to feed 540,000 silk worms, which if properly fed and managed, will yield 180 lbs. of silk, which at \$4 per pound, the lowest *reeled value*, will amount to \$720; then let us deduct from this, the expense of culture—as the interest on the value of the land, cost of attendants, &c. which after making a most liberal allowance, is but \$154.20, and will leave \$565.80, as the clear profit of an acre.”

“This looks well on paper—but can it be realized.”

“Why, yes. It *has been* realized, and it is not presumptuous to affirm, that what has been done, can be done again. Our *calculation* assumes that 3,000 worms or cocoons will make a pound of silk, whereas 2,547 have done so, as was practically tested by Mr. *Elias Frost*, of Plainfield, Massachusetts.”

“But then there is so much *trouble* in attending the worms.”

“Not so. There is no part of the work of feeding which cannot be done by the children and females of every family. Any child who is old enough to pick a mulberry leaf, and carry a small basket, will prove a serviceable hand in an establishment for feeding worms. And then the labor of feeding only lasts from five to six weeks.”

“Really your description is very *flattering*.”

“Not more so, according to our belief, than is justified by the most sacred regard to truth; and here let us enjoin it upon you, as a duty you owe your country, to set the example in your own neighborhood, of commencing a mulberry orchard; it will raise up for you a more enduring monu-

ment than the most skilful artists could erect out of brass or marble; for it will live throughout all time in the hearts of your neighbors, and their descendants. We exaggerate not. Look at the question in its naked and simplest form. Now suppose you were to plant ten acres: for instance, you take that old sedge field that now does not yield you a cent—which, save the pest we have just named, gives life to nothing; plough it up; plant it in mulberry trees, manuring them in the hole, and in four years it will nett you upwards of \$5,000, annually, if you pay proper attention to the management of your worms."

"But then there is so much trouble in keeping the mulberry trees free from weeds, and you know we farmers cannot spare the time to devote to ground that does not bring us in something."

"Here is the root of the evil of which we have so often and so justly complained. What, let us ask you, can be acquired in this life without "trouble"? It is the tenure by which we exist and have our being. "*Trouble*," as you term it, is one of the very excitements which animate us and render life pleasurable. The desire to overcome human impediments constitute the most prolific source of happiness to a man of well regulated mind. But, you have greatly overrated the degree of trouble in keeping your mulberry orchard free from weeds. The very labor of keeping it clean, if properly managed, will prove a greater source of profit to you than the same number of acres of your best land in wheat."

"How can you make that appear? Convince me of that, and I will adopt your recommendation at once."

"In order to keep your mulberry orchard clean for the first three years, and until the plants have got sufficient start not to require it, you must cultivate potatoes, beets, turnips, mangel wurtzel, or ruta бага, between the rows. Manure these in the drills, and they will nett you more than the best wheat field you have got."

"Will not this injure the mulberry plants?"

"No. Not at all. On the contrary, it will do them lasting benefit and urge forward their growth with decided advantage."

"Well then, as I promised you, if you convinced me on that point, I would adopt your recommendation, and as I am so convinced, I shall turn up the old sedge field this fall, put it in corn next spring, and thus prepare it to receive the mulberry plants the ensuing year."

"Let us now look at this subject in another point of view; let us examine the moral influence it will exercise in every neighborhood, in which the mulberry culture may be introduced. In each

district of our country, no matter how much *opulence* there may be in it, there is also a large portion of *poverty*. You cannot point out the spot in which, in the compass of ten miles square, that we cannot direct your attention to objects whose sufferings appeal to the kindlier feelings of the heart. *Here*, we find a widow, with some half dozen orphans around her, struggling through want and barely sustaining the positive calls of nature—and *there*, is a worthy poor man situated on a worn out soil, surrounded by a houseful of children, whose claims upon his protection he cannot meet. In all probability, they are brought up without education; in ignorance, and with scarcely a supply of the ordinary necessities of life. The day opens and closes upon them, but to make their wretchedness the more hideous and insufferable. But let us change the scene. A few wealthy men in those neighborhoods, have gone extensively into the silk culture, that *widow* and her children, have each found profitable employment, and so also have the worthy poor man and *his*, and what is the effect? Why those hovels so late the scenes of utter misery, are now filled with grateful hearts and countenances beaming with joy. We all know what an immense difference which additional employment for five or six weeks will make in the affairs of a poor family, and then as the wealthy farmer will receive a very large amount for his silk, he can and will doubtless pay his poor neighbors, whom he may hire, liberally, and thus enable the heads of such families to educate their children, and bring them up in industry and comfort. And pray let us ask you, what man of wealth would exchange the rich harvest of feelings, which such a condition of things would yield, for any earthly consideration—and the more especially would he prize those feelings, as while he would be doing so much good, and dispensing so much solid comfort to the worthy and industrious poor around him, his own private fortune would be accumulating with a rapidity of stride to which he had been theretofore a stranger."

"Again, there is the owner of a little farm of fifty or a hundred acres, which barely yield him a living. If he makes both ends meet at the end of the year, he enters upon the business of the new one, with a gladdened countenance and rejoicing heart. He casts his eye to the Mulberry orchards of his rich neighbor, he hears of his success, and he borrows hope from it. He plants his acre in Mulberry, and when a few years roll around, he finds that his frugal wife and daughters are annually adding to his income a sum which makes him feel rich; for let us tell you, that a surplus of *five hundred dollars annually*, to a man in the humbler walks of life, is indeed a fortune; for the idea of fortune, like every thing else, is relative. But there is another aspect in which we would

wish you to view the mulberry and silk culture. We allude to its political bearing. By it, the small states—the old ones with their worn-out and exhausted fields—will be enabled to add to their numerical strength, and thus increase their importance and weight in the scale of the confederacy. We have thus briefly laid our views before you, and am happy to find you so apt and willing a convert, and trust your promised example will have the effect of making your neighbors tread in the path you are about to prepare for them."

We hope by this time, that our reader has placed himself in the position of the person with whom we have just concluded our fire-side-talk, and under the hope that he will go and do likewise, we shall conclude by wishing him entire success.

SEASON OF TRANSPLANTATION.

Farmers who may desire to plant out orchards, or any less number of fruit trees, should bear in mind that *this* is the time. Ornamental trees should also be set out *now*.

SKINLESS OATS.—Mr. James M. Garnett, of Virginia, in a late paper in the *Farmers' Register*, bears the following high praise in favor of this newly introduced variety of the oats. It weighs 47 pounds to the bushel, which is 5 pounds more than the heaviest English oats weigh. He planted one pint in drills in his garden, nine inches apart one way and two inches the other. The pint sowed 247 square yards, and produced 116 pints. Its average height was four feet. He thinks from the appearance of the grain that it would make very good flour, but for horse feed that it is superior to any other yet discovered.

We have received the first number of the *American Journal of Scientific and useful knowledge*, a new periodical, published in New York and Albany, by Freeman Hunt & Co. and edited by Thomas M'Kee, Jr. As its title imports, it is to be devoted to the diffusion of scientific and useful knowledge. The number before us is not only gotten up with great mechanical neatness and good taste, but is filled with matter well calculated to impress the public with a favorable impression of the talents and judgment of its editor. The introductory remarks are well written, and evince much manliness of thought and independence of spirit. We are pleased with them, because they are *American* in their sentiments, and manifest a determination on the part of their author, to aid in the good work of building up for our country, a reputation which shall not rest on a foundation constructed of foreign materials.

COCOONS.—We have been asked several times lately where small parcels of cocoons could be sold, and take this occasion to suggest to the eastern manufacturers of silk, the propriety of

urging upon their commercial correspondents in the principal southern cities, the expediency of purchasing cocoons. The best and most efficient encouragement which could be given to the mulberry culture, would be the establishment of agencies for the purchase of the raw material. We are aware that any quantity can be sold in the eastern cities; but then the person who has but a few thousand cocoons, cannot be expected to send them thither for sale. We make this suggestion with the double object, of subserving the mutual interests of the culturists and the manufacturers, and hope our fellow laborers of the editorial corps in New England, will further our views by enforcing the necessity of the measure upon those most intimately connected with its success.

LARGE VEGETABLES.

The crop of POTATOES this year is remarkably productive and of excellent quality. We received a few days since, from Robert Banning, Esq., a sample of his crop of Red Skin potatoes, and thought them large enough in all conscience—a day or two after we received a sample of Dr. Barnett's crop of White Skin—and must say we have never seen a finer sample; none of them, (about two dozen,) weighing less than a pound each, some 1½ lb. and upwards. Then came Thomas C. Nicols', Esq., sample of his crop of Mercer potatoes, equal, if not superior to those we have been importing from Baltimore for the last few years.

Our neighbors, Dr. Dawson & Son, have on their counter a potato weighing 1 lb. 10 oz. and radishes weighing 5½ lbs. Our citizens contemplate living well this winter, as our beef market has much improved.

We had written the above before we received our last night's mail (not by the Slow and Easy) where we find it stated in the Baltimore Patriot, that they have been presented with a Radish weighing 13 lbs., 23 inches long, and 31½ in circumference. The Annapolis Gazette, says, Mr. S. Goldsmith left with us, a Potato of the Mercer kind, weighing 3 lbs. 3 ounces. The Rockville Press, says, a Potato weighing 5 lbs. has been raised a few miles from this place, the present season. The Baltimore Gazette, says, we saw a Beet, though broken off from the roots considerably upwards—not less than eight inches it was supposed—it still measured twenty inches in length—it was nineteen inches in circumference, and the Frederick Examiner states that in the garden of Mr. Jacob Doll, of that town, there grew a Cabbage, this season, which was found to weigh 18 lbs. This beats us all hollow, but we won't stay beat.—*Easton Gazette.*

LARGE POTATO.—Yesterday, Mr. Z. P. Smead brought to this office a potato, weighing 3 lbs. and 10 oz., which grew in Huron township, Ohio, and he informed us that in digging 200 bushels, he had found about 400 potatoes nearly as large as this.—*Sandusky Clarion.*

LARGE CABBAGE.—We were shown on Saturday last, a large Cabbage, which grew in the garden of Mr. Lamar Hay, in this borough, that weighed thirty-four pounds. The head was well

formed, solid, and much larger, we are informed, than the one exhibited at the late Horticultural Exhibition, in Philadelphia. There was no other manure than COAL ASHES placed on the ground where the cabbage grew. We can safely challenge the State to produce one of equal size.—*Pottsville, Pa., Miner's Journal.*

SILK CULTURE IN THE UNITED STATES.

[From the Tennessee Farmer.]

[We insert with pleasure, the following communication on the subject of silk, transmitted to us by the author, and we trust, it will have the effect of stimulating our farmers to active exertions in raising the mulberry tree, and making the other preparations, necessary to a full and fair experiment for ascertaining the value of the silk culture, in which he appears to take so deep an interest.—*Ed. Ten. Far.*

Mill's Point, Hickman county, (Ky.) }
Aug. 19, 1835. }

Friend Emmerson.—It is with pleasure I acknowledge the receipt of your five numbers of the Tennessee Farmer.

The first article which caught my eye was an essay on the culture of silk, and a letter from Judge Spencer to his friend, Samuel Hopkins. I am indeed highly delighted to observe that the culture of silk is attracting the attention of the sagacious mechanic, the talented, enterprising projector and the public spirited philosopher. I have ever admired the ingenuity and delighted in the society of the industrious insect which with so much adroitness and perseverance converts the mulberry leaf into the rich and golden cocoon. Curiosity led me three years since to visit the Shaker Village on White-water, State of Ohio, and in May I first saw the operations of this peaceful and productive little creature. Under the control and care of one of those innocent daughters of religion and love, I saw to my utter astonishment, the daily conversion of the raw material taken from the forest, into the glossy and beautiful fabric, in which queens are apparelled and princesses are robed. Notwithstanding the evidence of the profit in raising the worm in the town of Mansfield and County of Windham, was so palpable and convincing to the world, yet, we find our countrymen, notwithstanding all their passion for novelty, and burning desire for gain, almost insensible to the advantages of this branch of labor, until a few years back when it began to receive an impulse from the generous efforts of our government and the exertions of a few talented and discriminating men. I recollect when a boy, of noticing some standard white mulberry trees in the garden of an amiable Doctor Hall, Pomfret, Windham County, (Con:) he had introduced them in order to gratify the curiosity of his accomplished and interesting wife and two beautiful industrious daughters, who at that early period were directing their efforts to raise the worms, reel the silk, and convert it into sewing silk—this they accomplished. Little did I then think that this branch of industry would constitute one of the most delightful pursuits of my life, and that I should live to see mechanic, speculator and philosopher, all animated in giving force and success to this novel employment. The government of the U. States publish-

ed a treatise on the culture of the mulberry tree and the rearing of the silkworm, and afterwards distributed 30,000 copies gratis. The government have explored the reign of native wealth which is open to all, and it is now the interest and duty of the citizen to avail himself of the resources which nature and art offer to enrich himself and benefit his country. Ever since I was so interested in this innocent pursuit, I have been adding to my knowledge—collecting essays on these subjects—experiments made in different States by planters—by settled silk raisers—by widows, and agricultural societies. In addition to this fund of information I have devoted my time and feeble talents to the practical branches; and at this moment I sensibly feel and do say, that in no possible manner can the resource of talents, ingenuity, and wealth, be more profitably expended than in preparing extensive orchards, and rearing up buildings for the operations and residence of this wonderful insect and never failing friend to man. Experiments from all quarters are pouring in upon us to rouse our energy into action. Inventions are multiplying to facilitate the hitherto arduous, and difficult operation of reeling—machines are going up—factories are raising, and farmers and their rosy cheeked girls are parting with their scruples, and inviting the little stranger to take up their abode with them.

In a letter recently received from that active, generous and highly esteemed fellow-citizen, Nicholas Longworth, of Cincinnati, he observes—"I am entirely satisfied that the culture of silk will spread itself rapidly over our beloved land, and that the labours of cultivating the various kinds of mulberry tree, and of rearing the worm and reeling the silk will be much abridged, by the active, the energetic and intelligent faculties of citizens of the United States." How completely has one part of this prediction been verified in the late inventions of the ingenious Gay and Moseley.

When such men as Homergue, Du Ponceau, Mease, of Philadelphia, Longworth, of Cincinnati, and Gideon B. Smith, of Baltimore, appear to be active in its promotion, what can be expected but that the mighty tide will turn, and the silk interest will share largely in attention, and participate proudly in the triumphs which American zeal and skill will effect in our land.

In a letter not long since from Gideon B. Smith, he urges it most imperatively on me, "not to neglect immediate attention to the rearing of an orchard of the *Morus Multicaulis*, as those whose foresight enable them to make favourable preparations, will unquestionably share most largely in the benefits of its introduction for food for the silk worms." Example has a force which precept has not, and experiments which have been made and are now making in every section of the union, will give an impetus to silk raising which will soon be amalgamated with our other all absorbing passions for wealth and profit.

Depend upon it, Friend Emmerson, ten years will place these interests on a level with those of cotton, rice and grain. Our countrymen possess strong, nervous, unbounded energies—almost insensible of depression; the native sons of our soil accomplish any thing within the reach of any ingenuity or intellect given by our Creator to man. There is no branch of business (throwing aside

all views of profit,) carried on in society, which is attended with so many charms and so few toils and exposure as the rearing of silk-worms. Except the gathering of the leaves, every part of the process is conducted under cover from heat and rain—hence delicate females, and aged people can work to as much advantage as the healthy and robust. The peaceable disposition evinced by those sagacious little insects is not the least of their virtues. They seem incapable of imitation, but every one pursues his labours with an equanimity and zeal even surpassing the industrious bee. The Shakers have raised silk and manufactured it for twenty years. Their system is by no means expensive or complicated. The boys gather the leaves and the sisters conduct the worm through every stage of his life. Their manner of killing the chrysalis is three days exposure to the warm sun in June.

No body of people is so well calculated to conduct this business as Shakers. The purity and innocence of their lives—their calmness and industry—their uniform cleanliness and economy, and their insulated life, free from the turmoils and distractions of the world, fit them in an eminent manner for the prosecution of these innocent labours. It will take several years for the skill and enterprise of our countrymen to raise the balance to the hitherto enormous sum which has been expended for imported silks. The market never can be glutted—competition never can weaken the sinews of activity and ambition—but the more general the cultivation the better the market to give encouragement to manufactures.

I trust, Friend Emerson, that you will not suffer your efforts to relax in rousing up the attention of your countrymen to their dearest interest of wealth and independence in circumstances. The elevation of young convicts from depraved and prodigal steps to the benign and heavenly walks of religion has a powerful effect in convincing mankind of error and the delusions of a wicked life, and it is just so with the reports of experimentalists and projectors in this important branch of national industry. Success with one, wins the notice of another, and thus the fire of ambition extends from region to region, and soon operations assume an interesting and formidable shape, both to the advantage and honour of the adventurous silk raiser.

I have made several cursory remarks on this my favourite pursuit, now permit me, Friend Emerson, to detail to you a few facts, within actual observation.

Mr. Daniel Rowe, an ingenious and enterprising citizen of Dayton, (Ohio,) about three years since, occupied three large rooms in the city with worms. He had never before that season paid any attention to them, or the culture of the mulberry tree. He hired a man and a boy to go to the forest, two miles from Dayton and gather leaves—two girls were employed five weeks in feeding them and preserving the cocoons. At the end of that time he gathered (if I recollect right) eight barrels of cocoons. He was indebted wholly to the woods for their food—about the same time he set out five acres of trees, some white and some red mulberry from the woods—two years after this I received information in a letter from Nicholas Longworth, of Cincinnati,

that a factory was established there (in Dayton,) and that vests and handkerchiefs were manufactured with success, and much to his honour and to the delight of the citizens. The five acres of mulberry, according to all concurrent statements, particularly according to the one made in April, 1835, by Judge Spencer, ought to yield him 1500 dollars clear gain.*

We must recollect in this concern that the trees are improving every year—the same buildings and furniture will answer twenty years to come which does now. Success attends the efforts of that very amiable, talented and ambitious citizen. Another fact which I have made public in a lecture which I gave on the subject of the silk culture. Two log cabins at the Shaker village, in Ohio, and a garden house, were appropriated as nurseries for the worms. The leaves were brought half a mile by boys, and the worms fed and cleaned by two girls of thirteen years old, superintended by a young and beautiful shakerness, somewhat acquainted with the business; in five weeks the cocoons were exposed to the sun and reeled into raw silk, and sold to Gen. Daniel Gano, of Cincinnati, I think, for \$97.50—he gave the Shakers for sewing silk \$10 per pound.

The committee appointed by Congress, at the instance of Mr. Van Rensselaer, to report on a manual for the raising of silk in the United States, say, that from one acre planted with mulberry trees, 500 lbs. of raw silk can be obtained, this, at a minimum price of \$5 per pound would be 2500† dollars. The more I write and think on this subject, the greater is my astonishment, that my countrymen do not take hold of the business with Herculean energy and go ahead. Create first the food, an abundance of the raw materials will be the consequence, and then the hands to manufacture will soon be found.

It deeply regards every farmer's individual interest to exert himself to secure a share in the culture of silk, of which no other crop we have, can be compared to it for richness and excellence, and in a sense of public duty to the powerful community of which we are members, the exertion ought to be great, as it would make a great addition to our resources. The cotton manufactories are dependent on the south for their raw materials; silk would be our own, and nations and individuals cannot be too careful to secure within themselves means for their prosperity and greatness. But I have digressed a little.‡

The Valentine Silk Company, Providence, Rhode Island, have 30,000 trees on their farm—each tree yielding on an average, one half pound of silk, worth at least \$5 per pound, making their

Notes by the editor of the Farmer & Gardener.

*It will do more than this. Five acres if properly planted and managed ought to yield nearer \$3,000.

†This is a very high estimate, nearly three times the yield assumed by us in our Manual, though we believe that an acre of mulberries in hedge rows, would produce foliage enough to feed the requisite number of worms to make that quantity of silk.

‡This digression was uncalled for and entirely too sectional; we dislike every thing that savors of such prejudices.

income worth \$75,000 per annum§: powerful machinery is in operation to weave the material, and elegant stuffs have already been produced.

The Eaton Register says, Mrs. Alfred, of Newcome, Preble County, Ohio, has the present season, with the aid of one small girl and two boys about twelve years old, fed and attended about 50,000 silk worms, with the leaves of the common wild mulberry tree—from her labours of six weeks she realized \$235, from the sale of the raw material; the raw material when put into skeins would bring \$400. The silk she manufactured is equal in elegance and richness to any foreign silk; and yet this female accomplishes all her labours without the aid of theory or instruction. The report of the House of Representatives, through their committee, on the presentation of an elegant national flag by Mr. Du Pont, and manufactured in Philadelphia, by Mr. D'Homergue, says, that "50 years ago there was scarce a pound of cotton raised in the United States, and last year there was six hundred and forty thousand bags exported to England; there is nothing unreasonable in the conjecture, that a similar development may attend American silk."

The Dayton Journal of 1831, says, a citizen of our vicinity with two boys has attended 100,000 silk worms, which produced 300 pounds of cocoons, which sold in Cincinnati, for \$125.

It is stated by the Hamilton County Agricultural Society, in their circular upon the culture of silk, that four acres of ground, planted in white mulberry trees, near Boston, have fed worms enough to produce 420 pounds of silk, worth \$3.50 per pound, amounting to 1470 dollars. A single tree in France has been known to yield five dollars on the sale of its leaves.

The Cincinnati Chronicle says, Mrs. Daniel Parker, of Claremont County, has been active in introducing the mulberry tree in Miami Valley. She raised from 50,000 worms \$180 worth of silk, with the assistance of her two little daughters; she is preparing to extend her operations, and devote her time and talents to this business. Mr. Gideon B. Smith, of Baltimore, says, that a boy eleven years old, employed thirty-two hours, and a woman thirty-seven hours during the last season in rearing 10,000 silk worms,|| and that the cocoons before reeling were worth \$140. One female and one boy may with ease take charge of 10,000, by devoting forty days to them; the value of these 10,000 worms, before reeling, will be worth \$140, an amount which few females can earn in a whole year.

Poulson's Advertiser says, that five tons of raw silk were raised in two towns in Connecticut this year. One gentleman last year paid \$1500 for white mulberry trees, which he set out on a 100 acre lot.

The sales of sewing silk in Mansfield alone this year, amount to \$85,000, says the New England Farmer. The Cincinnati American says, Mr. James Smith, of Bladen County, North Carolina, made 100 pounds fine sewing silk,¶ besides

§This estimate is too high, we think \$15,000 would be much nearer the mark.

||This is evidently an error, Mr. Smith must have written it 100,000.

¶A very large production.

the floss from 200,000 worms, which sold for \$700; four or five negro children attended them under his inspection. These are a few of the countless facts respecting the productiveness of the silk worm.

No man delights more in being engaged in this business than myself, and none can wish the cause greater prosperity. If you think these remarks worthy a place in the *Tennessee Farmer*, you can give them an insertion.

Your sincere friend,

NATH. G. M. SENTER.

ON THE USE OF LIME AS A MANURE.

By M. PUVIS.

Translated for the *Farmers' Register* from the *Annales de l'Agriculture Française*, of 1835.

CONTINUED.

Extent of surface to which lime is suitable.

7. A great proportion of the soil of France does not contain the calcareous principle. The country of primitive formation—the mountains of which the rock is not calcareous—many soils even, of which the subsoils enclose calcareous formations—the great and last alluvion which has covered the surface, and which still composes it wherever the return waters have not carried it off with them—also extensive surfaces, in the composition of which the calcareous principle had not entered but in small proportions, and which small amount has been used by the successions of vegetation—all these kinds of soil, which compose at least three-fourths of the surface of France, to be fertilized, demand calcareous manures. If it is admitted that one-third of all this space has already received aid from lime, marl, ashes of wood, or of peat, of bones burnt, or pounded, there will still remain the half of France to be improved by such means: an immense task doubtless—but of which the results will be still more prodigious, since it will cause the products of all this great space to be increased by one-half, or more.

Of the various modes of applying lime to the soil.

8. Three principal procedures are in usage for applying lime. The first is the most simple, and is the most general wherever lime is obtained cheaply, and where culture is but little advanced in perfection, and hand labor is dear. This consists in putting the lime [the burned limestone] immediately on the ground in little heaps at 20 feet average distance, and each heap containing, according to the rate of liming, between a cubic foot of the stone, to half that quantity. When the lime has been slaked by exposure to the air, and has fallen into powder, it is spread over the surface, so as to be equally divided.

9. The second mode differs from the first in this respect: the heaps of stone are covered with a coat of earth, about six inches thick, according to the size of the heap, and which is equal to five or six times the bulk of the lime. When the lime begins to swell, in slaking, the cracks and openings in the heap are filled with earth: and when the lime is reduced to powder, each heap is worked over, so as to mix thoroughly the lime and the earth. If nothing hurries the labor, this last operation is repeated at the end of 15 days—and then after waiting two weeks more, the mixture is spread over the soil.

10. The third process, which is adopted where

culture is more perfect, where lime is dear, and which combines all the advantages, of liming without offering any of its inconveniences, consists in making compost heaps of lime and earth, or mould. For that, there is first made a bed of earth, mould, or turf, of a foot, or thereabout, in thickness. The clods are chopped down, and then is spread over a layer of unslaked lime of a hectolitre* for the 20 cubic feet, or a ton to the 55 cubic feet of earth. Upon this lime, there is placed another layer of earth, equal in thickness to the first, then a second layer of lime; and then the heap is finished by a third layer of earth. If the earth is moist, and the lime recently burned, 8 or 10 days will suffice to slake it completely. Then the heap is cut down and well mixed—and this operation is repeated afterwards before using the manure, which is delayed as long as possible, because the power of the effect on the soil is increased with the age of the compost—and especially if it has been made with the earth containing much vegetable mould. This method is the one most used in Belgium and Flanders: it is becoming almost the exclusive practice in Normandy: it is the only practice, and followed with the greatest success, in La Sarthe. Lime in compost is never injurious to the soil. It carries with it the surplus of alimentary manure which the surplus of product demands for its sustenance. Light soils, sandy or gravelly, are not tired by repetitions of this compost. No country, nor author, charges lime, used in this state, with having been injurious to the soil. In short, this means seems to us the most sure, the most useful, and the least expensive mode of applying lime as manure.

11. The reduction of burnt lime to powder by means of a momentary immersion in water, in handle-baskets, serves much to hasten the slaking, whether the lime is to be applied immediately to the soil, or in compost heaps—some hours in this manner sufficing, in place of waiting two weeks. However, the effect of lime, in this state, may well be different, as we have then the hydrate of lime, and less of the carbonate of caustic lime.† If great rains follow, this process is not without inconveniences, because then the lime, which is already saturated with water, is more easily put in the state of mortar, which ought to be avoided more than every other injury to the manure.

The reduction of burnt limestone to powder, whether it be spontaneous, or by immersion, produces in the compost a bulk greater by one-half or more, than that of the stone—10 cubic feet, producing 15—or a ton, 10 cubic feet. This increase is not uniform with all kinds of lime; it is more stronger with rich [grasses,] waters, and weaker with the poor [eaux maigres.‡]

* The hectolitre contains 6102.8 English cubic inches, or is equal to 2.83, (or about 2.6-7) Winchester bushels. Therefore the hectolitre is rather more in proportion to the hectare, than our bushel is to the acre. The decalitre (named next page) is the tenth of a hectolitre, and of course the "double decalitre," is the fifth. Tr.

† An incorrect expression certainly, but literally translated. Tr.

‡ We are unable to give the meaning, with certainty, of these provincial terms. They are pro-

Liming as practiced in different countries.

In the Department of Ain.

12. The applications of lime in Ain date from fifty years back. At the present time, the soil which has been limed is still more productive than the neighboring, not limed. Nevertheless, liming is but beginning to extend, while marling, which was begun fifteen years later, has already covered many thousands of hectares. This is because marling is an operation within the means of poor cultivators, being accomplished by labor alone; while liming requires considerable advances, especially in this country where lime is dear, and the dose given is heavy.

The dressings vary in quantity, from 60 to 100 hectolitres the hectare, according to the nature of the ground, and often according to the caprice of the cultivators. Although these limings have not been made with all the care and economy that was desirable, they have been very efficacious, when the soil has been sufficiently drained. The following tables, extracted from the registers of three contiguous domains, belonging to M. Armand, three years before, and nine years during the progress of liming, give us the means of appreciating the results. The quantities of seed and of crops, are calculated in double decalites, or in measures of fifths of hectolitres.

Table of product of the domain of La Croisette.

YEARS.	RYE.		WHEAT.	
	Seed.	Produ't	Seed.	Product.
1822	110	600	24	146
1823	110	764	24	136
1824	110	744	24	156
1825	107	406	27	251
1826	106	576	28	210
1827	100	504	30	249
1828	90	634	36	391
1829	82	538	48	309
1830	60	307	60	459
1831	78	350	48	417
1832	55	478	68	816
1833	61	529	52	546

Table of product of the domain of Meyziat.

YEARS.	RYE.		WHEAT.	
	Seed.	Product.	Seed.	Product.
1822	120	487	16	100
1823	120	708	16	103
1824	120	644	18	94
1825	112	504	28	128
1826	120	677	20	115
1827	115	594	20	162
1828	118	726	40	328
1829	104	566	41	277
1830	79	298	71	477
1831	91	416	43	326
1832	79	441	75	786
1833	76	616	48	351

bably equivalent to our "hard and soft" water—terms which are as little descriptive of what they mean, as the French "eaux grasses" and "eaux maigres."

Table of product of the domain of *La Baronne*.

YEARS.	RYE.		WHEAT.	
	Seed.	Product.	Seed.	Product.
1822	110	505	22	180
1823	110	643	22	138
1824	110	662	24	149
1825	102	398	32	252
1826	110	612	32	187
1827	107	546	34	204
1828	98	696	35	343
1829	84	608	40	268
1830	91	389	59	374
1831	92	411	40	295
1832	70	512	80	649
1833	75	511	51	471

The application of 3000 hectolitres [8490 bushels] of lime, of the value of 6000 francs [\$1116] upon 32 hectares [80 acres] of ground, made successively during nine years, has then more than doubled the crops of winter grain, the seed being deducted. The other crops of the farms have received a proportional increase; and the revenue of the proprietor, in doubling, has annually increased two-thirds more than the amount of the sum expended in the purchase of lime. Still, there is not yet half the arable land limed, since of 66 hectares, only 32 have received this improvement.

The products of 1834 are still greater than those of 1833. But these are sufficient to prove the importance and utility of applying lime to suitable soils.

Many other examples sustain these results; and from them all it appears, that the wheat seedings are increased from double to triple—that the rye lands, from bringing four to five [to one of seed] in rye, are able to bring six to eight in wheat—and that other products are increased in proportion. The melioration then is, relatively, much greater upon bad ground than upon good, since it is two-thirds and more on the wheat land, and on the rye lands the crop is increased in value threefold.

Flemish liming.

13. The use of calcareous manures in the department of the North, as in Belgium, appears to be as old as good farming. It is now much less frequent in Belgium. The ancient and repeated limings have, as it seems, furnished to great part of the soil, all that is necessary to it, for the present. But the department of the North still receives lime, marl, or ashes, every where, or nearly so, where lime is not a component ingredient of the soil. They distinguish in this country two kinds of liming. The first [*chaulage foncier*] consists in giving to the soil every 10 or 12 years, before seed time, four cubic metres, or 40 hectolitres of lime to the hectare.* They often mix with the slaked lime, ashes of dead coal, or of peat, which enter into the mixture in the proportion of from a third to a half, and take the place of an equal quantity of lime. The other mode of liming [*chaulage d'assolement*] is given in compost, and at every renewal of the rotation, or upon the crop of spring grain. It is also in regular

use in this country, still more than in Belgium, upon the meadows, on cold pasture land, which do not receive the waters of irrigation. It warms the ground, and increases and improves its products. The older the compost is, the greater its effect, which lasts from 15 to 20 years, at the end of which time the dressing is renewed.

14. The limings of Normandy, the most ancient of France, are kept up in the neighborhood of Bayeux, while elsewhere they are forbidden in the leases: however, now they go over all the surface which has need of them; but in place of being applied immediately to the soil, as in the ancient method, the lime is almost always put in compost.

Liming of La Sarthe.

15. Of the modes of using lime, that of La Sarthe seems preferable. It is at once economical and productive, and secures the soil from all exhaustion. It is given every three years, at each renewal of the rotation, in the average quantity of 10 hectolitres to the hectare,† in compost made in advance, with seven or eight parts of mould, or of good earth, to one of lime. They use this compost on the land for the autumn sowing, and placed alternately with rows of farm-yard manure. This method, of which the success is greater from day to day, is extending on the great body of flat argilo-silicious lands, which border the Loire; and it would seem that this method ought to be adopted every where, on open soils that permit surplus water to drain off easily. On very moist soils, the dose of lime ought perhaps to be increased.

We would desire much to inculcate with force the suitableness, and eminent advantages, of using at the same time lime and [alimentary] manure. Here they do better still, in using at the same time a compost of lime with earth and dung. In addition, during the half century that the Mah-ceaux have been liming, the productiveness of the soil has not ceased to increase.

16. The countries of which we have spoken, are those of France in which liming is most general. However more than half the departments I think, have commenced the use, and in a sixth, or nearly, it seems to be established. Doubtless, the first trials do not succeed every where. There is required a rare combination of conditions for new experiments, even when they have succeeded, to induce their imitation by the great mass.—Still, successful results are multiplied, and become the centres of impulse, from which meliorations extend.

English liming.

17. The English limings seem to be established upon quite another principle, from that of France. They are given with such prodigality, that the melioration upon the limed soil, has no need to be renewed afterwards. Whilst that in France we are content to give from a thousandth to a hundredth of lime to the tillage soil, from 10 to 100 hectolitres the hectare, they give in England from one to six hundredths, or from 100 to 600 hectolitres the hectare. The full success of the method of our country might make us regard the English method as an unnecessary waste. It seems that they sacrifice a capital five, six, ten times greater, without obtaining from it a result

much superior; and that without lavishing [alimentary] manures also afterwards, that the future value of the soil would be endangered, in the hands of a greedy cultivator.

We will not urge the condemnation of a practice which seems to have resulted in few inconveniences. The abundance of alimentary manures which the English farmer gives to his [limed] soils, has guarded against exhaustion: and then, in very moist ground, they have doubtless by the heavy liming, made the soil healthy, and its nature seems modified for a long time to come; and such kinds, and where *humus* abounds, will take up a heavy dose of lime, and as it seems, always without inconvenient consequences: there is then formed there the *humate of lime* in the greatest proportion, and we will see that this combination is a greater means of productiveness in the soil.‡

Surface liming.

18. In Germany, where liming and marling, like most other agricultural improvements, have recently made great advances, besides the ordinary modes of application, lime is used as a surface dressing. They sprinkle over the rye, in the spring, a compost containing 8 to 10 hectolitres of lime to the hectare, fifteen days after having sown clover. Also on the clover of the preceding year, they apply lime in powder, which had been slaked in the water of the dunghill, the dose being less by one-half: the effect upon the clover and the following crop of wheat is very advantageous.

In Flanders, where they use lime mixed with ashes, it is particularly for the meadows, natural or artificial, and the application is then made on the surface.

Burning lime.

19. The burning of lime is done with wood, with pit coal, or with peat; in temporary kilns, or furnaces, in permanent, or in perpetual kilns. It is burned in many places most economically with coal, but it is not so good a manure as the lime burned with wood, because, as it seems, of the potash contained in the latter case. There are but few places in which peat is used for this purpose; however, in Prussia, they succeed with three-fourths peat, and one-fourth wood. It is, doubtless, a very economical process, and the *Société d'Encouragement* has given in its transactions plans of peat kilns; but I know not whether the operators who received prizes for their use, have continued the practice.

The temporary kilns admit of the burning of a great quantity of lime; but the permanent kilns burn it with most economy of fuel. In the first, 5 quintals of wood burn 4 quintals, or 1 ton, or 2½ hectolitres of lime—and in the others, the same quantity of wood will suffice for 6 quintals, or 1½

‡In this passage the author distinctly affirms the truth of the chemical combination in the soil of calcareous and vegetable (or other putrescent) matter—or the power of calcareous earth to fix and retain enriching matter—which is maintained in the *Essay on Calcareous Manures*, (pp. 30, 31,) to be the most important action of calcareous matter as an ingredient of soil. Still M. Puvion seems to attach much less importance to this than to other agencies of lime, which are considered in the *Essay* as of little value in comparison. *Tr.*

*46 bushels to the acre, English or American measure.

†11½ bushels to the acre.

hectolitres. But in the permanent kilns such is the expense of construction and repairs, that they cannot be justified except when kept in frequent use. Coal burns from three to four times its bulk of lime—the shape of the kiln, the kind of limestone, and that of the coal, making the difference. Hydraulic lime is calcined more easily than the common [chaux grasse.] The egg-shaped kilns for coal seem to be preferable to the conical, which are more generally met with.

Precautions to be used in Liming.

20. Whatever may be the method adopted for using lime, it is essential that, as with all calcareous manures, it should be applied in powder, and not in a state like mortar—and upon the earth when not wet. Until the lime is covered up finally, all rain upon it ought to be avoided, which reduces it to paste, or to clots; and this injures its effect greatly, and even more than reasoning can explain. It ought not to be placed but upon soil, the surface mould of which drains itself naturally [by permitting the water to pass through.] On a marshy soil, unless the upper layer has been well dried, or in a very moist soil, from which the surface water does not sink or pass off easily, the properties of lime remain as locked up, and do not make themselves seen, until by new operations, the vegetable mould has been drained and put in healthy condition.

On an argillaceous and very humid soil, the use of marl, which is applied in great quantities, is preferable to that of lime, because that it can have a more powerful effect in giving the deficient health to the surface mould. On soil of this kind, a deep ploughing is a preliminary condition, essential to the success of either liming or marling; because in increasing the depth of the tilled soil, we increase also the means of putting the surface into healthy condition.

21. To secure the effect of lime on the first crops, it ought to be mixed with the soil some time before the sowing of the crop: however, if it is used in compost, it is sufficient that the compost may have been made a long time previously.

Lime, whether alone, or in compost, spread dry upon the soil, ought to be covered by a very shallow first ploughing, preceded by a slight harrowing, in order that the lime, in the course of tillage, may remain always, as much as possible, placed in the midst of the vegetable mould.

Lime, reduced to the smallest particles, tends to sink into the soil. It glides between the small particles of sand and of clay, and descends below the sphere of the nutrition of plants, and stops under the ploughed layer of soil: and when there in abundance, it forms by its combinations, a kind of floor, which arrests the sinking water, and greatly injures the crops. This is an inconvenience of lime applied in heavy doses, and is hastened by deep ploughing.

CINNAMON FIELDS OF CEYLON.

"August 31.—Our morning was, as usual on a first arrival, taken up by visits; in the afternoon we drove in Sir E. Barnes' sociable, through the far-famed cinnamon gardens, which covered upwards of 17,000 acres of land on the coast, the largest of which are near Colombo. The plant thrives best in a poor, sandy soil, in a damp atmosphere; it grows wild in the woods to the size of a large apple tree, but when cultivated,

is never allowed to grow more than ten or twelve feet in height, each plant standing separate. The leaf is something like that of the laurel in shape, but of a lighter color; when it first shoots out its red, and changes gradually to green.—It is now out of blossom, but I am told that the flower is white, and appears when in full blossom to cover the garden. After hearing so much of the spicy gales from this Island, I was much disappointed at not being able to discover any scent at least from the plants, in passing through the gardens; there is a very fragrant-smelling flower growing under them, which at first led us into the belief that we smelt the cinnamon, but we were soon undeceived. On pulling off a leaf or twig you perceive the spicy odour very strong, but I was surprised to hear that the flower had little or none. As cinnamon forms the only considerable export of Ceylon, it is of course preserved with great care; by the old Dutch law, the penalty for cutting a branch was no less than the loss of a hand; at present a fine expiates the same offence. The neighborhood of Colombo is particularly favorable to its growth, being well sheltered, with a high equable temperature; and as showers fall frequently, though a whole day's heavy rain is uncommon, the ground is never parched."—*Bishop Heber.*

SATURDAY AFTERNOON.

BY N. P. WILLIS.

I love to look on a scene like this,
Of wild and careless play,
And persuade myself that I am not old,
And my locks are not yet gray;
For it stirs the blood in an old man's heart,
And it makes his pulses fly,
To catch the thrill of a happy voice,
And the light of a pleasant eye.
I have walked the world for four-score years;
And they say that I am old,
And my heart is ripe for the reaper Death,
And my years are well nigh told.
It is very true; it is very true;
I'm old, and "I bide my time;"
But my heart will leap at a scene like this,
And I half renew my prime.
Play on, play on, I am with you there,
In the midst of your merry ring;
I can feel the thrill of the daring jump,
And the rush of the breathless swing,
I hide with you in the fragrant bay,
And I whoop the smothered call,
And my feet slip upon the seedy floor,
And I care not for the fall.
I am willing to die when my time shall come,
And I shall be glad to go;
For the world, at best, is a weary place,
And my pulse is getting low:
But the grave is dark, and the heart will fail
In treading its gloomy way;
And it wiles my heart from its dreariness,
To see the young so gay.

CONTENTS OF THIS NUMBER.

Annunciation of the Silk Manual and an essay shewing the advantages of the Silk Culture—season of transplantation—notice—skinless oats—of the American Journal of scientific and useful knowledge—of a market for cocoons—of large vegetables—Nathaniel G. Senter's essay on the Silk Culture—M. Puvion on the use of lime as a manure—account of the Cinnamon fields of Ceylon—Willis' Saturday night—prices currents—advertisements.

RUFFIN ON CALCAREOUS MANURES,
SECOND EDITION, just received at this office.

ALSO,

A few pounds of the celebrated **SKINLESS OATS**, price 50 cents per lb. said to produce 80 bushels per acre.
R. SINCLAIR, jr. Seedsman,
connected with this office

BANK NTOE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

VIRGINIA.	
U. S. Bank,	par
Branch at Baltimore,	do
Other Branches,	do
MARYLAND.	
Banks in Baltimore,	par
Hagerstown,	do
Frederick,	do
Westminster,	do
Farmers' Bank of Mary'd, do	do
Do. payable at Easton,	do
Salisbury,	5 per ct. dis.
Cumberland,	do
Millington,	do
DISTRICT.	
Washington,	do
Georgetown,	Banks, ½.
Alexandria,	do
PENNSYLVANIA.	
Philadelphia,	do
Chambersburg,	do
Gettysburg,	do
Pittsburg,	do
York,	do
Other Pennsylvania Bks. 1½a2	do
Delaware [under \$5],	3a4
Do. [over 5],	1a2
Michigan Banks,	5a
Canadian do,	5a
FARMERS BANK OF VIRGINIA	
Bank of Virginia,	2½a2
Branch at Fredericksburg, do	do
Petersburg,	do
Norfolk,	do
Winchester,	do
Lynchburg,	do
Danville,	do
Bank of the Valley,	do
Branch at Romney,	2
Do. Charlestown,	do
Do. Leesburg,	do
Wheeling Banks,	1½a2
Ohio Banks, generally 2½a2	do
New Jersey Banks gen. 1½a2	do
New York City,	1a
New York State,	2½a2
Massachusetts,	2a2½
Connecticut,	2a2½
New Hampshire,	2a2½
Maine,	2a2½
Rhode Island,	2a2½
North Carolina,	2½a2
South Carolina,	2½a2
Georgia,	3a2½
New Orleans,	4

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.	—	—
BACON, hams, new, Balt. cured,	pound.	11	—
Shoulders,	"	10	—
Middlings,	"	8½	9
Assorted, country,	"	7	8
BUTTER, printed, in lbs. & half lbs.	"	18½	25
Roll,	"	20	—
CIDER,	barrel.	—	—
CALVES, three to six weeks old,	each.	3 00	6 00
COWS, new milch,	"	17 00	30 00
Dry,	"	8 00	12 00
CORN MEAL, for family use,	100lbs.	1 75	2 00
CHOP RYE,	"	1 62½	1 75
EGGS,	dozen.	—	—
FISH, Shad, No. 1, Susquehanna,	barrel.	7 75	—
No. 2,	"	6 75	—
Herrings, salted, No. 1,	"	4 00	4 12½
Mackerel, No. 3,	"	5 75	—
Cod, salted,	cwt.	3 00	35 0
LARD,	pound.	10	10

FOR SALE.

A DURHAM Short-horn bull 15-16 blood. He is from a fine cow and got by Col. Powell's celebrated bull *Monk*—now two years old. Price, delivered at York, Pa., \$130.

Letters addressed to the editor *post paid*, will be attended to. nov 10 2t

STOCK OF IMPROVED SHORT HORN DURHAM.

THE editor of the *Farmer and Gardener*, Baltimore, has for sale two 7-8 and four 3-4 bred cows, 2 full bred and seven 7-8 bred bulls of the improved short-horn breed. They are all fine animals whether regard be had to their milking or fattening propensities. Their pedigrees are indisputable, all tracing to the *British Herd book*. They will be sold low for cash, their excellence being considered.—To any person, company, or society, who may want several, a great bargain would be given.

Letters addressed to the editor upon this subject, must be *post paid*. nov 10 4t

NORFOLK THIN RIND HOGS.

I HAVE two Sows in a fine thrifty state, having lately weaned their pigs, and one fine thrifty boar between 2 and 3 months old, which I would dispose of on the following terms, if immediate application should be made, viz. \$32 for the lot, or \$25 for the choice of the sows and boar.

ROBERT SINCLAIR,
Baltimore.

no 17 1t

oe 13 2t

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,	bushel.	2 50	
CATTLE, on the hoof,	100lbs.	4 50	5 25
CORN, yellow,	bushel.	new	50 to 65
White,	do	do	50 to 65
COTTON, Virginia,	pound.	18 1/4	
North Carolina,	"		
Upland,	"	18 1/4	20
FEATHERS,	pound.	37	40
FLAXSEED,	bushel.	1 25	1 37 1/2
FLOUR & MEAL—Best wh. wh't fam.	barrel.	7 50	8 00
Do. do. baker's,	"	7 00	7 50
Do. do. Superfine,	"	6 25	6 50
SuperHow. st. in good de'd	"	6 37	
" wagon price,	"	6 25	
City Mills, extra,	"	6 50	
Do.	"	6 25	6 37
Susquehanna, firm & scarce	"	6 12 1/2	6 25
Rye,	"	4 50	4 62
Kiln-dried Meal, in hhds.	hhd.	19 50	20 00
do. in bbls.	bbl.	4 12 1/2	
GRASS SEEDS, red Clover,	bushel.	5 00	5 75
Timothy (herds of the north)	"	2 75	3 25
Orchard,	"	2 25	3 00
Tall meadow Oat,	"	2 00	2 50
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.		15 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
HOGS, on the hoof,	100lb.	7 00	7 50
Slaughtered,	"		
HOPS—first sort,	pound.	12 1/2	
second,	"	10	
refuse,	"	8	
LIME,	bushel.	33	35
MUSTARD SEED, Domestic,	"	5 00	6 00
OATS,	"	32	34
PEAS, red eye,	bushel.		
Black eye,	"		1 25
Lady,	"		
PLASTER PARIS, in the stone,	ton.		3 50
Ground,	barrel.	1 25	
PALMA CHRISTA BEAN,	bushel.	2 00	
RAGS,	pound.	3	4
RYE,	bushel.	80	83
Susquehanna,	"	none	
TOBACCO, crop, common,	100 lbs	5 00	5 50
" brown and red,	"	5 00	7 00
" fine red,	"	7 00	9 00
" wrappery, suitable	"		
for segars,	"	5 00	10 00
" yellow and red,	"	8 00	12 00
" good yellow,	"	11 00	16 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	4 75	5 00
" ground leaf,	"	5 00	8 00
Virginia,	"	6 00	
Rappahannock,	"		
Kentucky,	"	8 00	14 00
WHEAT, white,	bushel.	1 35	1 45
Red,	"	1 25	1 35
WHISKEY, 1st pf. in bbls.	gallon.	37	37 1/2
" in hhds.	"	33 1/2	
" wagon price,	"	30	bbls.
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 50	
To Wheeling,	"	1 75	
WOOL, Prime & Saxon Fleeces, ...	pound.	62 to 75	32 to 34
Full Merino,	"	52 to 62	30 to 32
Three fourths Merino,	"	47 to 52	28 to 30
One half do.	"	42 to 47	26 to 28
Common & one fourth Meri.	"	38 to 42	25 to 26
Pulled,	"	38 to 42	26 to 28

Wagon price best bakers' Flour 6
No change in Wool—in good demand at quotations.

LEON.

THE splendid bull LEON, is now at *Clairmont, N.Y.* ry, where he will remain a few weeks. He is a full blooded improved Durham short horn, and allowed to be one of the best bred animals in the country. He will serve Cows at \$5 each. He is milk white, with a hide as glossy and soft as satin. For his pedigree, see the advertisement, in which he is offered for sale in this day's paper.

no 3

A GREAT BARGAIN.

A full blooded Improved Durham Short-horn bull rising five years old, and his two sons about 1 1/2 year old each, 7-8 bred, has been left with the editor of the Farmer and Gardener for sale. These are first rate animals, and would be sold a bargain, if application be made promptly.

All applications by letter must be post paid.
nov 17 3t.

MULBERRY TREES AND SEEDS.

100,000 Chinese Mulberry or Morus Multicaulis of various sizes at reduced prices.

150,000 White Italian Mulberry at very low rates by the 1000 or larger quantities.

200 lbs. White Italian Mulberry seed.

Also the following superior large sized trees which now form a Mulberry orchard—but must be removed:

2000 Chinese Mulberry 3 years old 7 1/2 to 8 feet high.

2000 do do 2 do 5 1/2 to 6 do

2000 do do 3 do and budded on the

White Mulberry which have proved to be much more hardy than those from cuttings.

These 6000 trees are the greatest acquisition that any silk culturist can possibly obtain, and there is not another equally valuable collection for sale in the Union, as those who have such will not part with them.

50,000 cuttings of the Chinese mulberry at reasonable rates by the 1000, &c.

The New Catalogues of Garden and Flower seeds are just published, comprising the largest assortment ever offered for sale, and including all the choice new varieties. Venders will be supplied in any quantities at very low rates and a liberal credit.

The subscribers will enter into contracts to supply any number of Chinese or White Italian Mulberries on very reasonable terms.

Fruit and Ornamental Trees of all kinds, Garden seeds, Bulbous roots, Green-house plants, and every other article promptly supplied and at very moderate prices.

N. B. Pear trees of large size.—Catalogues will be sent to every applicant.

Wm. PRINCE & SONS.

no 17

4t

1000 DOZ. POTATO ONIONS.—This very excellent and remarkable production was introduced into England a few years since, from Egypt. It is not produced from seed, but by off-sets from the roots, like tulips and hyacinths, (is therefore a certain crop) and from its extraordinary fecundity, and other estimable qualities, has already (where it is known) become one of the most valuable garden products. Like the root, whose name it bears, this useful vegetable multiplies under ground, each bulb producing a cluster of onions, no wise inferior to the best of the species. The following is the mode of culture, and we would remark that fall planting is the true method—one reason why many have failed in an abundant crop, has been by planting in the spring instead of fall—they require only the slightest protection in winter. But to the directions as stated by an experienced cultivator.

"By the 1st of August, or as soon as the tops fall and wither, take them out of the ground, and lay them several days in the sun; then put them away in a dry place until October or November; they should then be re-set like tulips. The beds intended for them should be previously well wrought, and the plants set in rows about a foot apart. The small or young ones should be separated from the others, for these grow larger, but produce no offspring the first year. Before the approach of winter, some coarse litter may be spread over them, which should be removed in the spring—and they will vegetate and produce a plentiful crop. They ripen in June, and are universally esteemed for their mild and agreeable flavor." For sale by R. SINCLAIR, Jr.
At Sinclair & Moore's Ag. Rep'y, on Light-st.
nov 10

TO AGRICULTURISTS.—The analysis of Soils, marls, mineral waters, and other productions, interesting to those engaged in Agricultural pursuits, is performed with promptness and accuracy, by
TYSON & FISHER, Chemists,
no 3 Druggists, No. 192 Market street, Baltimore.

Printed by Sands & Neilson, N. E. corner of Charles and Market streets.

A SPLENDID DURHAM BULL.

THE editor of the Farmer and Gardener has for sale that beautiful and improved Durham short horn bull, LEON. He was 5 years old on the 8th of August last, and has been well taken care of; his color is pure white; with a hide as glossy as satin; he is perfectly docile; and is a bull of uncommon fine temper, and although but a few days off a travel of between 70 and 80 miles, and has been fed all the season on grass, is in fine condition.

Any person wishing to possess himself of one of the best blooded animals in the country, will do well to apply speedily. The following is his

PEDIGREE.

The improved Durham short horned BULL LEON, bred by Wm. H. Freeman, Esq. of Baltimore. Calved on the 8th of August, 1830; now in the possession of S. Canby, of Woodside, Del.

"Leon" is by Gloucester, dam Flora.

"Gloucester" was imported in July, 1826, by Mr. J. H. Powel, calved Feb. 28th, 1825, (bred by J. Whitaker, esq. one of the most celebrated breeders in England) by Frederick, dam Adela, (bred by Mr. Whitaker; gave with her first calf 24 quarts per day) by Orpheus; g d Alfred, (bred by Mr. Hestler, gave 24 quarts per day) by Alfred, (200 guineas was refused for Alfred) gr g d by Windsor, gr gr g d Old Daisy, (bred by Mr. C. Collings, (gave 32 quarts daily) by Favorite, sire of Comet; gr gr gr g d by Punch; gr gr gr gr g d by Hubback.

"Frederick," roan, (bred by Mr. Charge) got by Hulton, dam Orbit, by Comet; (Comet sold for 1000 guineas;) g d Splendor by Comet; gr g d Flecked Twin by Major; gr gr g d Red Simmon by Favourite; gr gr gr g d Flecked Simmon by Bartle; gr gr gr gr d Old Simmon, (bred by Mr. Charge,) descended from the Studley White Bull.

"Hulton," (bred by Mr. Charge,) got by Newton, dam Meteor by Comet.

"Newton," (bred by Mr. Charge) got by Comet, dam Fanny by Mr. Charge's Grey Bull.

"Comet," red and white roan, calved in 1804, (bred by Mr. Collings,) got by Favourite, dam Young Phoenix, by Favourite; g d Phoenix by Foljambe, &c. &c. (Comet was sold for 1000 guineas at Mr. Collings' sale, Oct. 11th, 1810.)

"Gloucester's" pedigree can be found more at large in a work called "Hints for American Husbandmen, published by the Pennsylvania Agricultural Society," in 1827—he is also recorded in the English Herd Book.

"Flora," (dam of Leon) was got by Sampson, dam Betty, g d Old Betty; Sampson by son of Ossian, d. by Comet; Ossian by Favourite; Favourite by Bolingbroke; d. Phoenix by Foljambe; g d by Alcock's Bull; gr g d by Smith's Bull; gr gr g d by Jolly's Bull.

"Flora's" pedigree can also be found at large in the 'Memoirs of the Pennsylvania Agricultural Society for 1824,' and is likewise recorded in the English Herd Book.

J. H. Powel, esq. considers "Gloucester" one of the finest Bulls ever imported by him.

no 3

FOR SALE,

A HEIFER rising a year old, with a pedigree which makes her a 15-16ths bred improved Durham Short horn—she is well grown, and prettily marked.—Enquire of the editor.

no 3

SAXONY RAMS.

The editor of the Farmer and Gardener has for sale 2 full blooded Saxony RAMS, and 2 1/2 blooded do. These sheep are of a family remarkable for their fine fleece, their wool always commanding the best prices in the market.

ALSO

The bull *Brilliant*, a large sized animal of the Improved Durham Short-horn breed. He is red and white; was got in England, and calved in Frederick county, Md., on the 12th May 1829. His dam was Matchless, got by Favorite, (purchased at the sale of the late R. Colling, a celebrated breeder) son of Favorite, dam by H. Allison's Gray bull, sire Orlando, that died on the passage from Liverpool, out of Rosina, from Yorkshire, that gained the highest prize premium of ten sovereigns at a Cattle show in Manchester, England.

no 3

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 30.

BALTIMORE, MD. NOVEMBER 24, 1835.

Vol. II

—THIS publication is the *successor* of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, NOV. 24, 1835.

OUR SILK MANUAL.

We have compressed, by the free use of *double columns, a large page, and suitable type*, into a pamphlet of 72 pages, as much matter as would make two large octavo volumes in the fashionable method of book making, our object being to get as much as possible into a small compass, in order that we might sell the work at a price so moderate as to place it at once within the reach of all. We have, therefore, fixed its price at 50 CENTS, a sum so inconsiderable, that every one, who so inclines, may obtain a copy. We feel certain that if the subject is properly estimated by agriculturists, that the Silk Culture is calculated to make a great moral and physical change over the whole face of our country, and to banish penury from the door of every farmer in this land, who has enterprise and industry enough to enter into it.—Our great object in the compilation of our work, has been the advancement of the comfort, and consequent happiness, of poor females, destitute children, and the decrepit aged, of both sexes, and we do hope that from the affluent of the gentler sex, we shall receive such auxiliary aid, as will ensure to the culture an onward course. Should they interest themselves with their fathers, husbands and other male relatives, it must succeed; for no one can resist an appeal addressed to the heart by a female advocate, whose eloquence and feeling may have been aroused into action by the noble motive of doing good.

We continue the able paper of M. Puvion, on the use of lime as applied to the purposes of agriculture, and respectfully call the attention of our readers to it.

This being the season for planting bulbous roots, we would remind the lovers of flowers, that R. Sinclair, Jr. is in the expectation of daily receiving an invoice of the most choice bulbs ever imported into this country.

Let no agriculturist omit planting out select fruit and ornamental trees during this, the best month in all the year for such work.

VALUE OF SILK STOCK.

We understand that the stock of the Rhode Island Silk Company, an account of which we publish in this day's paper, has advanced 100 per cent. upon its par value. This is a very strong evidence of the confidence of the people of the east, in the productive character of the Silk Culture, and we trust will serve to awaken a spirit of enterprise in that region of genial sun and soil, which seems to have been marked out by nature as the home of the worm and the land of the Mulberry.

ORNAMENTAL TREES.

Among the numerous trees that are planted for ornament or shade, there is none more entitled to the consideration of the gentleman of taste and refinement, than the *Morus Alba*, the *White Italian Mulberry*. It is beautifully straight in its stem; its lateral branches are numerous, and form a far-stretching and graceful circle, and when arrived at maturity, the tree is as large as most of the forest trees. It is quick of growth, hardy, tenacious of life, and makes as durable posts as almost any other tree to be found. In addition to its other good qualities, it is a clean tree, and with a few years pains will form an invaluable live-fence, being impenetrable, as a hedge, to horses, cattle, hogs or sheep.

There is, in our estimation, no tree better adapted to be grown in a lane, or one so well calculated to beautify the main approach to a homestead, or any other large establishment.

In publishing our *project* for the establishment of a "*Pattern Farm*," the editor of the *Salem (N. C.) Reporter*, makes the following approbatory remarks, which we subjoin, because we are gratified to find that we are sustained in our estimation of the importance of the measure by the able conductor of that print. Upon the utility of such an establishment, we have never entertained but one opinion, and that is, that it would exercise the most wholesome influence over the business of agriculture. We know that there is a prejudice, and probably a just one, against *mere theoretical farmers*—but our plan embraces nothing which could lead to any such result as the education of *mere theorists*. It contemplates the combination of *theory* with *practice*; the application of those great fundamental principles of chemistry to the

business of husbandry, which properly belong to it, and which enable the agriculturist, at a single view, to determine the course, which a just and enlightened economy would suggest, in the management of his soil, and the cultivation of his crops. Knowledge never injured any one: it will neither break a limb nor pick a pocket: no one ever yet was made a bad citizen by being *thoroughly* instructed in his occupation. We repeat it, *knowledge* never yet injured any one: *cunning*, we admit, may beget the desire of living by one's wits; but then "*knowledge*" and "*cunning*" are words as dissimilar in their import as any two words can be. The tendency of the one, is to make men *better*, that of the other, to vitiate the morals, and mould its possessor into a shuffling trickster—an over-reaching knave. We would ask, is there any just reason why agriculture, as well as any other branch of human science, should not have its *schools* of instruction? *Physic, law*, and the *languages*, have, and properly too, each their Colleges, Universities, and associations, so also has *Theology*. Mechanics have their institutes, their Trades' Unions, and other societies.—The Merchants have their chambers of commerce. In fact, each and every department and pursuit of life, seem to have been more tenacious of their interests, and to have promoted them better than that of agriculture. It is true, that Agricultural Societies do exist in many of the states; but then these are individual compacts, acting in a confined sphere, and although they operate most beneficially in creating a laudable spirit of emulation and improvement, yet, from their very nature, they must necessarily stop short of that *greatest* good, which we wish to see at work. We desire that, in each state, there shall be established an *Agricultural School*, to be connected with a *farm*, whereon the students shall labor and learn, *practically*, the use and value of those great principles, which we would have taught therein. Without further remark, we annex the article alluded to:

[From the North Carolina Salem Reporter.]

PATTERN FARM.—The reader will find in our agricultural columns an article, copied from the *Farmer and Gardener*, under the head of "*Pattern Farm*," to which we solicit an attentive perusal. It will be seen that the Hon. Judge *Barbour*,* of Virginia, has submitted to the people of that State a proposition to found a Professorship of Agriculture in her University, &c.

The project of such an establishment is submitted to the people of the United States by the Editor of the Farmer and Gardener. The subject needs only a fair and impartial investigation, and its utility and importance will be obvious to all—while it must be admitted, by every candid person, that the long practised system of cultivation in our country is much in want of reformation.—It should be one of the primary objects of every rational being to aid in bringing about a remedy to improve this all important department of human industry—AGRICULTURE.

We earnestly submit the subject of a "Pattern Farm," to the consideration of the citizens of this State, believing it to be a powerful measure to bring about, in a short time, an improvement in the principles of the cultivation of our soil, by dissemination throughout the State the most approved modes of culture.

We feel confident that the subject is worthy of the favorable notice of every citizen of this State; and that, should a Professorship of Agriculture be founded in our University, on the plan submitted by the Farmer and Gardener, or any similar one, its effects might produce more Wealth, Happiness, and Contentment, than any project ever brought before the people of North Carolina.

* It is not the *Judge*, but his patriotic brother, Governor Barbour.

A GREAT YIELD OF CORN.

The *Zanesville, Ohio, Gazette* of the 12th inst. contains the following article, which we do hope will stimulate the corn growers throughout the country to emulate Mr. *Renick*. His land was doubtless a rich bottom of alluvion soil; but then even with ordinary land, much may be done in the way of melioration. *Lime, ashes, weeds, leaves, stable manure*, and the countless other materials which enter into the composition of the food of plants, will do much to bring up the low standard of production which obtains on a majority of the corn growing lands. Much of which does not produce more than 3 and 4 barrels to the acre, and when from 5 to 8 barrels are harvested, it is considered, in many parts, a wonderful crop; and in truth, as matters now stand, so it is. Forty bushels to the acre is considered a profitable crop; but if 157 bushels can be raised on an acre, the *average* crop on *good lands*, (and all lands may be made good) should be brought up to the standard of 100 bushels to the acre. We have always thought there was too much space between the rows of corn, and this, and many other proofs within our knowledge, go to confirm our belief. The giving of this premium by the Agricultural Society, of Pickaway county, Ohio, reminds us that the whole western shore of Maryland, is without a single Agricultural Society. This thing should not be so; their patriotic brethren on the eastern shore have managed their affairs better; they have kept their society in active ex-

istence, dispensing its lights of husbandry in every direction, and doing good that blessings may follow in their train.

By the way, we hope to see a new face put upon the husbandry of the *Eastern shore*. With the aid of their inexhaustible beds of *shell marl*, and *green sand*, should they adopt the mulberry and silk culture, there is nothing to prevent the citizens of that beautiful peninsula, from making it the garden spot of America. We have already made our article somewhat in shape and size like a lady's postscript, or we would dwell more at large upon the local advantages of that interesting portion of our brave little state.

"A premium of Ten Dollars was awarded on Monday 26th ult., at the Agricultural fair in Circleville, to Mr. *Asahel Renick*, for the best acre of corn, *one hundred and fifty-seven bushels, and one peck!* The corn grew on Darby creek bottom, in Pickaway county, and received no extra cultivation; the hills were 3 feet apart."

Large Cheese.—On the 14th inst., Mr. Thos. Meacham, of Otsego county, presented to the citizens of Rochester, a cheese made at his dairy, which weighed 700 pounds. The meeting at which it was presented, was held in the arcade gallery in that city. Mr. Meacham made a speech on presenting it, to which the Mayor of the city replied. Mr. M. has some other large cheeses made; one weighing 1400 is intended for President Jackson, one of 750 lbs., for Vice President Van Buren, and another of the same weight for Governor Marcy. Mr. M. makes from 50,000 to 60,000 pounds of cheese per year.

SILK MANUFACTORY.

We believe that few of our readers are aware of the extent to which the manufacture of articles from the cocoon is carried in New England. We take from the Providence (R. I.) Journal the subjoined account of an establishment in that city.

"The Rhode Island Silk Company, which was late the 'Valentine Silk Company,' was incorporated at the recent session of our Legislature, with a capital of \$100,000. Their Factory is situated upon Eddy street, the next building to the old Glass House. The machinery, with which it is nearly filled, is propelled by a six horse power steam engine. The steam is generated with the siftings of anthracite coal, at an expense of 33 cents per day. This, till recently, useless and refuse portion of the coal is ignited and rendered about as valuable as any other, by the aid of Reynolds' patent blowing apparatus. While preparing their machinery and instructing their operatives in the art, they have manufactured from 16 to 1800 yards of rich, heavy goods. The number of hands has recently been very much increased, and, with the additional power looms about to be put in, the company contemplate making from 300 to 400 yards of goods per week.—Of course, as there is no domestic supply, they are compelled to manufacture foreign silk. Another year, however, they will probably derive a considerable amount of their raw material from

their own plantation. This plantation is on the western border of the city, and consists of thirty acres of land particularly well adapted to the growth of the mulberry tree, and is already in a high state of cultivation. Upon it there is a large well finished two story house, and a barn and granary—a cocoonery 150 feet long, built last spring, and about 16,000 mulberry trees of very vigorous growth, most of which are five years old, and the remainder four. From these trees it is estimated that an average amount of at least 2000 pounds of wound silk may be produced per year, for the next five years, or two ounces to a tree—and for the succeeding five years double the amount. This is a moderate estimate compared with the one made by the Boston Company, and, indeed, compared with the results of experience, of those who have been engaged in growing silk in Connecticut for many years. The company are about putting out 40,000 more trees of three years' growth, in hedges after the Italian mode. These, it is estimated, will yield an average rate of one ounce of wound silk to a tree per year for the next 5 years, or 2500 pound per year. The total product of the farm in silk, according to this estimate, would be worth, at \$4 per pound, \$18,000. One half of this amount is allowed for attendance upon the cocoonery and winding the silk into a marketable state,* leaving a nett profit of \$9,000. In addition to this ought to be reckoned the value of the crops of corn and potatoes which the best condition of the trees will require should be planted among them. With a liberal application of fish, which abound, as a manure within less than a mile of the farm, it may, beyond doubt, be rendered much more productive

* This estimate is entirely too high—in a large establishment, less than twenty-five per cent. should cover all expenses.

than in the above calculations, is anticipated, and by planting in hedge rows 100,000 more trees which it is competent to sustain, it would of course yield a manifold increase of silk. On one side of the farm is a beautiful pond from which the trees may be watered, by the aid of a forcing pump, in any period of drought.

ON SUCKERING INDIAN CORN.

The following extracts are from the pen of a practical farmer. We do not think the usefulness of an agricultural paper depends more on communicating new discoveries than of reminding farmers of what they already know; and on calling up ideas that will sharpen the faculties of observation and reflection. The extracts will illustrate our meaning:

"It was the former practice in this neighbourhood carefully to pull all suckers from Indian corn. This operation is now entirely abandoned; nature is left to do her own business in her own way; and farmers have the pleasure of gathering some more bushels of corn than they otherwise would, besides saving all the labor of doing worse than nothing. Providence always acts wisely; and why should we by our cunning cheat ourselves? I hope that my countrymen generally, will soon be rational enough, and exhibit common sense enough, to abstain from docking horses, suckering corn, &c.

"It is deemed best where corn is intended to

be cut up, to let the crop stand till it is nearly mature, remembering however that the work should be done in time to escape the frost. The fodder is considered better, and the grain is absolutely so.—*Gen. Farm.*

TURNIPS.

As the turnip harvest has arrived, we take the liberty of suggesting to those who cultivate the Swedes, the method of pitting them for winter. The pits are limited to two feet in width and of an indefinite length, and are dug in a dry situation, seldom more than two feet deep. When the pit or hole is filled with roots as high as the surface of the ground, the turnips are laid by hand, the tops out, and sloping the centre, until they terminate in a ridge which is generally about two feet above the ground. The whole are then covered with straw and then with earth. The important point follows: The crown of the ridge is then pierced with an iron bar, at intervals of a yard, and the earth pressed out so as to leave an entire aperture into the turnips, into each of these apertures, a wisp of twisted straw is loosely inserted. The roots will heat, and unless rarified air is permitted to escape the turnips are apt to rot. The openings permit its escape, without danger of the frost doing injury. With this precaution we have not lost one bushel in a thousand. The same course would no doubt be beneficial in preserving the mangel wurtzel.—*ib.*

ON THE USE OF LIME AS A MANURE.

By M. PUVIS.

Translated for the Farmers' Register from the *Annales de l'Agriculture Française*, of 1835.

CONTINUED.

Various qualities of lime.

It is necessary for the farmer to know the nature of the lime which he uses. It may be pure, or mixed with silex, argil, or magnesia. *Pure lime* is the most economical, the most active, that which can produce the most effect in the least quantity.

Silicious limestone is used in greater quantity. The lime from it receives, as does the foregoing, the name of *hot lime*, and there is little difference in the application, except that more of the latter is wanting.

The *argillaceous lime* is the same as the hydraulic lime or the *poor lime* of builders. It appears that the first two kinds are more favorable to forming grain, while the latter favors more the growth of straw, grasses, and leguminous crops. It is better for the improvement of the soil, but a heavier dose of it is required.

Magnesia lime acts very powerfully, but exhausts the soil if given in a large dose, or if it is not followed by alimentary manure in abundance. It has exhausted some districts in England, and entire provinces of America,* and it is to this kind

*The author has been deceived by exaggerated accounts of injury from liming in America. It is probable that wherever it occurred, it was caused by the usual ignorance of the action of lime: from erroneously considering it as an alimentary, and directly fertilizing manure, and after applying it, wearing out the soil by continued grain crops. Such effects are spoken of by Bordley.—*Ed. FARM. REG.*

that seem due most of the complaints made against lime.

By chemical processes the farmer may make himself sure of the nature of the lime which he uses.

Pure lime is commonly white, and is dissolved without any thing being left, in nitric or muriatic acid.

Silicious lime is often gray, and leaves a sandy residue [after solution,] which is rough to the touch.

Argillaceous lime is obtained from stones which have a clayey odor and appearance: it is commonly yellow—and leaves, after the solution, a residue which is mostly an impalpable powder, [*et qui prend en masse,*] which may be formed into a mass when wet.

Magnesian lime is made from stone commonly colored brown or pale yellow; it forms a white cloud in nitric acid, diluted with water, and used in less quantity than enough for saturation.

Of second limings.

23. When the limed field returns to the state in which it was before the operation, when the same weeds re-appear, and the crops lower in product, it is time to renew the application of lime. It may be conceived that the time of the second liming depends on the amount given in the first. When the dressing has been light, it is necessary, as is done by the Flemings and the Manceaux, to recommence entirely, or to the extent of the first dressing, when it has been heavy, the next may be diminished by one half. Besides, in this matter we should take counsel of the state of the soil, and of experience, because there are some lands which demand, and can use heavier doses of lime than others.

Quantities applied.

24. The quantities of first as of second dressings of lime, vary with the consistence of soils: they ought to be small on light and sandy soils—and may, without ill consequence, be heavy on clay soils.

The dose ought to vary according as the soil is more or less pervious to water, or as drained well or ill by its texture. Small applications to soils from which the superfluous water does not pass easily, are but little felt; but if the dressing is heavy, and the ploughing deep, the lime aids the draining, and adds to the healthy state of the soil. It may be conceived that the quantity of lime ought also to be increased with the annual quantity of rain that falls—because in proportion to that quantity ought the openness of the soil, and its fitness for draining, to be extended.

Nevertheless, the practice of the departments of the North, and of La Sarthe, seem to indicate the average dressing which suits in general for land: thus the liming of the North, which every ten or twelve years gives to the soil 40 hectolitres of lime to the hectare, or a little more than three hectolitres a year, agree with that of La Sarthe, which gives eight or ten hectolitres every three years. The first plan gives at one dressing what the other distributes in four: as both make a like average, it may be thence inferred that the earth demands annually three hectolitres of lime to the hectare, [$3\frac{1}{3}$ bushels to the acre,] to sustain its fecundity. But as neither the soil nor the plants consume all this quantity of lime, it is to

be believed, that at the end of a greater or less length of time, the soil will have received enough to have no more need of it for a certain space of time.

Manner of treating limed lands.

25. After having by liming, given the soil a great productive power, having put it in condition to produce the most valuable crops, which are often also the most exhausting, it is necessary to husband these resources—to give manure in return for the products obtained—to employ as litter, and not as food, the straw, now increased by one-half—to raise grass crops from the soil now fitted to bear them with advantage—in short, to modify the general plan, and the detail of the culture according to the new powers of the soil, the prices of commodities, and to local conveniences.

However, it is not necessary to hurry the change of the rotation. Such an operation is long, difficult, very expensive, and ought not to be executed but with much deliberation.

Effects of lime on the soil.

26. The effects of lime, although similar to, are not identical with those produced by marl; and the qualities of soils limed, differ in some points from those of natural calcareous soils. The grain from limed land is rounder, firmer, gives less grain, and more flour, than that from marled land: the grain of marled land is more grey, gives more bran, and resembles that made upon clover, though it may be preferable to the latter. The grain of a limed soil is more like that from land improved with drawn ashes. Limed land is less exposed to danger from drought than marled land, on soils naturally calcareous. The crop is not subject to be lodged at flowering time, when the sowing was done in dry earth.

27. In limed earth, weeds and insects disappear. The earth, if too light, acquires stiffness, and is lightened if too clayey. The surface of the argilo-silicious soil, before close and whitish, is made friable, and becomes reddish, as if rotten: it hardens and splits with drought, and is dissolved by the rains which succeed. This spontaneous loosening of the soil facilitates greatly the labor of the cultivator, the movement of the roots of the growing plants, and the reciprocal action of the atmosphere upon the soil, which remains open to its influence.

All these new properties which the limed soil has acquired, doubtless explain in part the fertilizing means which calcareous agents bring to the soil: but we think it is still necessary to seek some of these causes elsewhere.

28. Lime, according to the recent discoveries of German chemists, seizes in the soil the soluble humus or humic acid, takes it from all other bases, and forms a compound but slightly soluble, which appears, under this form, eminently suitable to the wants of plants. But as this compound is not soluble in less than 2000 times its weight of water, while without the lime, the humus is soluble in a volume of water, less by one half, it would follow that, in consequence of lime, the consumption of this substance, and the productive power of the soil would, in like proportion, be better preserved. Since the products of the soil increase much from the liming, while the humus is economized, since these products borrow very

little from the soil, which remains more fertile while thus yielding greater products, it follows that the principal action of the lime consists, at first, in augmenting in the soil, and in the plants, the means of drawing from the atmosphere the vegetable principles which they find there, and next, in aiding, according to the need, the formation, in the soil or the plants, the substances which enter into the composition of plants, and which are not met with ready formed either in the atmosphere or in the soil.

The researches upon these various points are curious, important, interesting to practice as well as to science—and will lead us to explain, by means not yet appreciated, the action of lime upon vegetation.

Absorption by plants of the principles of the atmosphere, in the vegetation on uncultivated soils.

29. Saussure has concluded, from his experiments, that plants derive from the soil about one-twentieth of their substance; and the experiments of Van Helmont and of Boyle have proved that considerable vegetable products diminish very little the mass of the soil. But this fact is still better proved by the observation of what passes in uncultivated soils.

Woodland that is cut over in regular succession [*tallis*] produces almost indefinitely, without being exhausted, and even becoming richer, the mass of vegetable products which man gathers and removes, and of which the soil does not contain the principles. If, instead of woodland thus partially and successively cut over, we consider upon the same soil a succession of forests, and, for greater ease of estimation, resinous forests, we find, for the products of the generation of an age, forty to fifty thousand cubic feet to the hectare.

This product is less than that of the resinous forests of many parts of the country, and yet it is nearly equal in bulk to half of the layer of the productive soil itself: it represents an annual increase of 24,000 weight of wood to the hectare—and which is produced not only without impoverishing, but even while enriching the soil, by an enormous quantity of the droppings and remains of all kinds.

These products which do not come from the soil, are then drawn from the atmosphere, in which plants gather them by means of particular organs designed for that use. These organs are the myriads of leaves which large vegetables bear—aerial roots, which gather these principles either ready formed in the air, or which take up there the elements, to combine them by means of vegetable power. But these aerial roots exert quite a different and superior energy in gathering the constituent principles of plants in the atmosphere, to that of the roots in the ground—since the former furnish nearly the whole amount of the vegetable mass, while the latter draw but very little from the soil.

30. Plants may well find in the atmosphere the greater part of the *volatile* principles which compose them—the carbon, hydrogen, oxygen, and azote. But it is not so easily seen whence they obtain the *fixed* principles of which their ashes are composed. These products could not exist ready formed in the soil—for the saline principles contained in the ashes of a generation of great trees, which would amount to more than 25,000

weight to the hectare, would have rendered the soil absolutely barren, since, according to the experiments of M. Lecoq of Clermont, the twentieth part of this quantity is enough to make a soil sterile. We would find a similar result in accumulating the successive products of an acre of good meadow. It is then completely proved that the saline principles of plants do not exist ready formed in the soil. They are no more formed in the atmosphere, or the analysis of chemists would have found them there. However, as the intimate composition of these substances is not yet perfectly known, their elements may exist in the atmosphere, or even in the soil, among the substances which compose them.

Neither can it be said that these salts may be derived from the atomic dust which floats in the air; for this dust is composed of fragments organic and inorganic, carried especially to the plant themselves, and then, in estimating this atomic matter at the most, we will scarcely find in it the hundredth part of the saline substances contained in the vegetable mass produced. We ought then to conclude that the saline substances of plants are formed by the powers of vegetation, or of the soil.

31. In like manner as with the saline principles, the lime and the phosphates of ashes ought to be due to the same forces, whether that the roots take up their unperceived elements in the soil, or that the leaves gather them in the atmosphere. This consequence results evidently from this fact—that plants grown in soils, of which the analysis shows neither lime nor phosphate, contain them notwithstanding in large proportion in their fixed principles—of which [or of the ashes] they often compose half the mass.*

Absorption of plants, in vegetation on cultivated soils.

32. Vegetation on uncultivated soils operates under conditions altogether different from those of the cultivated, so that the results receive modifications which it is important to examine.

Nature produces, and continues to produce, all the vegetable mass in spontaneous growth, without any other condition than the alteration and succession of the species. In vegetation on cultivated land, by bringing together the same individual plants which are to grow abundantly on a soil and in a climate which, in most cases, are not those which nature had designed, there are required, besides the general condition of alteration of the species, frequent tillage of the soil, and means to repair its losses, that the culture may be productive, and be continued. However, with these new conditions, the force of absorption of plants on the atmosphere still furnishes the greater part of the vegetable principles in soils not limed—and still more in limed soils.

To form a precise idea, we will take it in the land of the writer, its culture and its biennial rotation. As the same qualities of soil are found elsewhere, as no particular circumstance increases or impairs its products, there would be found similar results, for the same qualities of soil, with

* This fact is explained very differently by the *Essay on Calcareous Manures* (Ch. VII.) where it is used to sustain the doctrine of *neutral soils*.
Ed.

a different culture. The inferences which we will draw from ours, will apply them to all others.

On our soil of the third class, [or worst quality] fallow returns every two years, with a biennial manuring of 120 quintals to the hectare.—This mass contains more than four-fifths of water, which should not be counted as manure, and consequently, the substance which serves for the reparation of the soil is reduced to 24 quintals. We reap, in rye, straw, and buckwheat, after the year of fallow, a dry weight of 40 to 50 quintals on an average. If it is supposed that all the manure is consumed, or employed in forming vegetable substance, still the soil would have furnished 18 to 20 quintals more than it received, and which excess would be due to the power of absorption, whether of the soil or of the plants, on the atmosphere.

On lands of middle quality, which yield a crop every year, with a double manuring, that is to say, of 48 quintals of dry manure, in two years there is a product in wheat, maize, or potatoes, which amounts to from 12 to 15,000 weight, 120 to 150 quintals, of which two-thirds, or 80 quintals at least are derived from absorption.

On soils of good quality, with a manuring of one-third more than the last, which is equal to 64 quintals of the dry substance to the hectare, there are obtained of dry products, in grain, straw, roots, or hay, double of the last, or nearly so, of which three-fourths, or 180 quintals are due to the power of absorption.

Lastly—upon the most fertile soils, (*sols d'exception*), where manures are useless, the product, often double, or at least half as much more than the last mentioned, will amount to 360 quintals to the hectare in two years. This product would be, as in spontaneous vegetation, entirely due to absorption.

We would have then, to represent the products of two years in quintals, in the four classes of soil under consideration, the progressive amounts of 42, 130, 240, 360: or by deducting from these products the weight of the manure, we would have, to represent the power of absorption, the progression 18, 82, 176, 360 quintals. From this is deduced, as the first conclusion, that, supposing the plants have consumed and annihilated all the substance of the manure given, (which is beyond the truth,) plants receive a much greater part of their substance from the atmosphere, than from the soil; and that this power of drawing food from the atmosphere increases with the goodness of quality in soils.

33. The proportion of fixed substances, or ashes, in agricultural products, is 43 pounds to the 1000, and consequently, in our four classes of land, the quantity amounts to 180, 559, 1032, 1548 pounds. But the soluble saline substances form at least half of these ashes: they are then produced in the two years of the rotation, in the quantities of 90, 279, 516, 774 pounds. But, according to Kirwan, barn yard manure yields 2 per cent. of soluble salts: then the manure given to these soils contained 48, 96, lbs. 128 of saline substances, which being deducted from the preceding quantities, leave the four classes of soils stated, 42, 183, 388, 774 lbs. of products in soluble salts, in two years of the rotation, gained solely

by the absorbing forces of the soil and of plants.*

34. But, in the same soils, with the same manures, and the same tillage, by the addition to the thickness of the ploughed layer of only one-thousandth part of lime, the products, whether volatile or fixed, are increased in a striking manner: the soil of the first named (or lowest) quality reaches the product of the second—the second rises one-half or more—and that of the best (of the manured soils) increases a fourth. Thus, our scale of product becomes 130,200,300 quintals—and deducting the manure, 106,152,236 quintals, for the two years of the rotation. The most fertile soil (*sol d'exception*) cannot receive lime beneficially because it contains it already; these lands all belong to alluvions, where the calcareous principle has always been found in greater or less proportion.

35. The product of fixed principles [as ashes] in the three classes of limed soils, would be 559,868,1290 pounds, and in soluble salts, 278,430,645 pounds; and deducting the soluble salts of the manure, the quantities would be 230,334,525. A light addition of lime has then doubled the force of absorption, and almost tripled the quantity of saline principles produced. One of the most remarkable effects of lime consists then, in making a soil produce a much greater proportion of saline principles: and if the experiments of M. Lecoq upon the efficacy of saline substances on vegetation are to be admitted, it would be in part the phenomenon of their production that lime would owe its fertilizing effect.

36. It results from what precedes, that salts are formed in the soil, or in vegetables: thus we see every day the nitrates of potash and of lime form under our eyes in the soil, or elsewhere, without any thing indicating to us the origin of the potash which is contained. But potash itself, again forms spontaneously in drawn ashes, according to the observations of the chemist Gellien. We see salts also renewed in the artificial nitre beds, with the aid of moisture and exposure to the air. But it is the presence of the lime that determines this formation more particularly. The nitrates abound in the ruins of demolished edifices; they are formed in the walls and in all parts of houses situated in damp places; they effloresce on the buildings of chalk in Champagne; they are produced spontaneously in the ploughed lands of the kingdom of Murcia. This effect, which we see that the calcareous principle produces every where, we think it produces in all the soils to which it is given, and where meet the circumstances which favor the formation of nitrates, viz: humidity, vegetable mould, and exposure to the air. But, according to the experiments of M. Lecoq, and others, and the opinion which is established of the old agriculturists, the nitrates are the most fertilizing salts. It would be then to their formation, which it pro-

*The proportions of ashes of different plants, and of their saline matters, vary greatly—and the uniform proportions assumed above, are far from correct, even as averages of unequal proportions. This will sufficiently appear from the following examples extracted from Saussure's table of the products of various vegetable substances. (See Davy's Agr. Chem. Lec. III.)

notes in the soil, that lime owes, in part, its effect on vegetation.

37. The foregoing proofs of the daily formation in the soil, and by vegetable life, of saline and earthy compounds, taken in nature and on a great scale, are doubtless sufficient: but they may still be supported by the experiment and opinions of able men who have adopted the same system.

And first—in the experiment of Van Helmont, in five years, a willow of five pounds grew to weigh 169, and had caused a loss of only two

ounces to the soil which bore it. But the 164 pounds which the willow had taken contained five pounds of ashes, which are due entirely to absorption, since the leaves and the other droppings of five years, which were not saved, would have given at least one pound of ashes, which makes up for, besides, all that which, in spite of the sheet of lead which covered the top of the vessel in which the willow grew, it might have received in the waterings, and from other fortuitous circumstances. Boyle has repeated and confirmed this experiment in all its parts.

		Constituents of 100 parts of ashes.						
NAMES OF PLANTS.		Ashes from 100 parts dry.	Soluble Salts.	Earthy phosphates.	Earthy Carbonates.	Silicia.	Metallic Oxides.	Loss.
Wheat in flour,	- - - -	—	43,25	12,75	0,25	32	0,5	12,25
Do. seeds ripe,	- - - -	—	11	15	0,25	54	1	18,75
Do. seeds ripe,	- - - -	33	10	11,75	0,25	51	0,75	23
Straw of wheat,	- - - -	43	22,5	6,2	1	61,5	1	78
Seeds of do.	- - - -	13	47,16	44,5	—	0,5	0,25	7,6
Bran,	- - - -	52	4,16	46,5	—	0,5	0,25	8,6
Plants of maize (Indian corn) a month before flowering,	- - - -	122	69	5,75	0,25	7,5	0,25	17,25
Do. in flower,	- - - -	81	69	6	0,25	7,5	0,25	17
Do. seeds ripe,	- - - -	46	—	—	—	—	—	—
Stalks of do.	- - - -	84	72,45	5	1	18	0,5	3,5
Spikes (tassels) of do.	- - - -	16	—	—	—	—	—	—
Seeds of do.	- - - -	10	62	36	—	1	0,12	0,8
Oats, (entire plant,)	- - - -	31	1	24	—	60	0,25	14,75

The proportion of soluble salts, 2 per cent. found by Kirwan in barn yard manure, however correctly ascertained in a particular case, can no more be relied on as a fixed and uniform proportion, or even a true general average, as used by M. PURVIS in the estimates above. ED. FARM. REG.

Lampadius, in different isolated compartments, filled with alumine, others with silex, others with [carbonate of] lime, all pure, has made to grow plants, of which the burning has yielded to analysis like results, and which, consequently, contained earths which were not in the soils which bore them.

Saussure, in establishing that plants do not take in the soil more than a twentieth of their substance, in extract of mould and in carbonic acid, has necessarily established, by the same means, that almost the whole amount of fixed principles do not proceed from the soil.

Braconnot has analyzed lichens, which contained more than half their weight of oxalate of lime—and he has observed others covered with crusts of carbonate of lime, when there was none of this earth in the neighborhood.

Shrader, in burning plants grown in substances which did not contain any earthy principle, has found in their ashes, earth and salts which were neither in the seeds sown, nor in the pulverized matters in which the plants grew.

Lastly—the analysis of Saussure, though showing more of the carbonate of lime in the ashes of plants which grew on calcareous soils, than on soils not calcareous, yet nevertheless, they have formed more than a sixth of the ashes from ve-

getables on silicious soil—and Einhoff has found 65 per cent. of lime in the ashes of pines grown on silicious soil.* The labors of science then confirm what we have above established, that plants, or the soil, form salts and earths.†

* It is presumed, from the context, that these silicious soils, were not the least calcareous. ED. FARM. REG.

† Van Helmont's experiment, cited first in the list above, like M. Puvis' reasoning in general, furnishes ample proof that most of the volatile parts of vegetables, and the greater part of their bulk, are drawn from the atmosphere—and they are equally defective in proving that earths and other fixed principles are thence derived, or are formed by the power of vegetable life. Distilled water is not entirely free from earthy matter, and if it had been used for watering the willow, it would in five years have given some considerable part of the five pounds of solid matter in the ashes. But as we are not told that it was either distilled or rain water, it may be inferred that the comparatively impure water of a fountain or stream, was used for watering the plant, and which would more than suffice in so long a time, to convey the whole increase of earthy and saline matter. The experiments of Lampadius and Shrader

are liable to the same objection—and the former to this in addition—that his earths were deemed absolutely pure, when, in all probability, they were not so—and that a very slight admixture of other kinds with each, would furnish the minute quantity that a small plant could take up during its short and feeble existence under the circumstances stated. The results stated of the experiments of Braconnot, Saussure and Einhoff, may be, and probably are, entirely correct—but they are fully explained by the doctrine of *neutral soils*, and need no support from, and give none to our author's doctrine of the formation of lime by vegetable power.

But though deeming Mr. Puvis altogether wrong in this, his main and most labored position, and that the proofs cited above, as well as some others in the preceding section, are of no worth, still these pages which present his theory, contains what is of more value. He places in a strong point of view the important truth that the atmosphere is the great treasury of manure, from which nature doubles and triples the amount of all the small portions given to the earth by the industry of man. The author's scale of actual products from different grades of soil is also interesting. It sustains the position assumed in the *Essay on Calcareous Manures*, that the worst soils are limed (or made calcareous) to most profit—and that alimentary manures, when needed, are most productive on the best soils.—ED. FAR. REG.

(To be concluded in our next)

SHEEP HUSBANDRY.

Communicated by the Rev. Henry Colman to the *New York Farmer and American Gardener*.

In my communication to the last No. of the *New York Farmer*, I referred to an account of a sheep establishment, politely furnished me by a very intelligent and experimental shepherd, Leonard Jarvis, Esq., of Cleremont, N. H., as accidentally mislaid. It has since come to hand, and I have the pleasure of presenting it to my agricultural friends, to whom it will be interesting.

Cleremont, N. H. August 23, 1835.

REV. H. COLMAN.—Dear Sir:—My avocations have been so pressing that until this moment I have not been able to communicate, as you requested me, some remarks upon my sheep and their treatment. Though I have been a shepherd 30 years, with a flock seldom ever less than 1000, more frequently 2000, I am still somewhat undecided what description of wool can be grown most profitably, and whether carefully breeding in and in, or judiciously crossing, produces the greatest improvement.

I commenced growing fine wool with a considerable number of the imported Paular and Escorial, then considered as the best stock in Spain, which flock I have kept to this day pure and unmixed, and at the same time, by crossing two flocks, have a third flock, combining generally the properties of both flocks, but occasionally showing the characteristics of one of them. At the introduction of the Saxons, I procured some valuable bucks, and by crossing them with pure Merinos, acquired a fourth flock, and consequently have had, for the last ten years, four distinct flocks, viz. Paular, Escorial, Paular and Escorial mixed, and Saxon united with Merino. These four flocks have acquired great perfection by my unremitted attention to the selection of breeders, the Merino at this time carrying a much finer

fleece than in 1810, as is apparent by contrasting the present clips with wool shorn in that year. There is very little difference in the fineness of my Saxon and Escorial fleeces; these last are somewhat heavier, with a staple more elastic. The Escorial has a greater resemblance than any other Merinos, both in form and fleece, to the Saxons that I have seen, and is probably the Spanish flock from which the most approved Saxons originated. The Paulars are more compact in form, have heavier fleeces, and are constitutionally the most hardy of all the Merino race. I omitted to say that I had also, when I began to grow fine wool, three other pure Merino flocks, viz. the Nigretta, Equiroz, and Montarco; but after a few years experience, I gave a decided preference to the Paular and Escorial, and discarded the others. You have now a concise description of my kinds of sheep; and I will say a word or two as to their general management.

I usually commence with dry fodder by the middle of November, and discontinue by the 5th of May; generally, however, for the first and last fifteen days, giving no hay, unless the ground should be covered, but feeding about half a gill of Indian corn to the sheep twice a day. As far as my experience extends, a ton of good hay will suffice for ten sheep, with the above quantity of grain. They are fed from racks in the yard, and have sheds to retire to at will. I have fed under cover, but believe that it tends to diminish the appetite, and injure the constitution. They are kept in separate yards, in number from 50 to 100, taking care to keep those of about the same degree of strength by themselves; and have running water, though, when the ground is covered with snow, I think they do well without it. I allow about four bushels of salt to the 100 sheep, the greater part of which is consumed when the sheep are at grass. My bucks run with the ewes from the 1st to the 10th of December, allowing three to the 100. The number of lambs reared depends much upon the season; 60 lambs from the 100 ewes may be the average from flocks in quality like mine; from coarser flocks the return is greater. The ewes are not permitted to receive the buck till after they are two years old, and I prefer bucks from two years old to four.

These few facts will probably afford you little or no information; but in compliance with your request I communicate them, and should be gratified on receiving some account of your own management. I am, dear Sir,

Very respectfully,

LEONARD JARVIS.

To this obliging communication, I take the liberty to subjoin a particular account of the above gentleman's flock from his printed advertising card.

"I have four distinct flocks of different properties, but of equal value in the market.

1. Saxon mixed with Merino: fleeces extremely soft and fine, averaging about 2½ pounds, staple generally very short; these are not so hardy as full blooded Merino, and consequently increase more slowly.

2. Unmixed Merino of the Escorial or Royal Spanish stock: these are very little inferior in fineness to the Saxon; staple is somewhat longer, and more elastic, fleeces rather heavier; these

are more hardy and productive than the Saxon Merinos.

3. Unmixed Merino of Paular stock: these have still heavier fleeces, not so fine or soft as the Escorial; they are compact in form; constitutionally most hardy of the Merinos, and by far the most prolific.

4. Grand full blood Merinos: stock the result of previous intercourse of Escorial and Paular bucks and ewes, and consequently uniting their qualities of form and fleece, but occasionally exhibiting the peculiar characteristics of the Paular and Escorial only.

(Signed)

LEONARD JARVIS."

WHEAT FLY.

The *New York Farmer and American Gardener* publishes the following article from the Rev. Henry Colman, which will be read with interest by all our grain-growing agriculturists. The discovery is as important in a national point of view as it will prove so to individuals engaged in the culture of small grain.

If the remedy be effectual, and we do not pretend to question it, the application of the lime, besides destroying the insect, will prove eminently serviceable in urging the plant forward to maturity.

"The grain fly or insect, which, for a few years past has been destructive to wheat in many parts of the country, has this year extended its ravages, and excited, wherever he made his appearance, very serious alarm. An eminent farmer in the State of New York wrote to me a year since that he must give up the cultivation of wheat, as his crops were so much injured that he hardly obtained a return equal to the seed sown. I knew another instance in the same State where, though the straw was large and the appearance promising, yet from thirty bushels sown not more than seven were obtained.

I have known other cases in which the whole field has been mowed and sold for litter; and in a recent excursion up the valley of the Connecticut, I have heard complaints every where, and hundreds of acres so destroyed that the grain they would yield would hardly pay for reaping. Besides this, the same insect has destroyed many fields of rye in the same manner as the wheat, and had been found this year in the oats; the progress of the insect has been about forty miles a year; and a distinguished gentleman in Vermont, a practical and extensive farmer, remarked that he feared they would on this account be obliged to relinquish the cultivation of small grains.

The habit of the insects have not been accurately observed. I myself have not yet seen the fly, but have seen the worms in the kernel after the grain has been destroyed. He is represented as being a small reddish fly, which is seen hovering over the wheat fields in immense numbers, while just in flower, and has been observed to alight upon the kernel or bud, to ascend it, and then descending to the inner side, to deposit his egg between the stalk and the kernel. I purposely avoid the use of all scientific terms,

wishing to be understood by common farmers. From this egg the worm is generated, which entirely consumes the grain while in the milk leaving nothing but the husk, in which are found several small yellow worms, about an eighth of an inch in length. As the work of destruction is now completed, any farther observation of its habits are of no importance, unless we can some way reach so as to destroy the germ of the insect. No preparation of the seed or ground has yet been found effectual to this end.

The continuance of the fly upon the grain is thought not to exceed three or four days, and they are seen in great numbers just at night. Some farmers have found late sowing a partial security, as the season for the flies has passed away before the wheat was in condition for their attack. Spring wheat sown as late as the 7th and 8th of June has been untouched, though in case of such very late sowing, the farmer will be very fortunate if, in attempting to escape the fly, he does not get nipt by the frost.

I have now, however, the extraordinary happiness of announcing to the agricultural public, what there is reason to believe will prove an effectual, as it is a reasonable and feasible preventive. Should it prove effectual, the remedy will be worth millions and millions of dollars to the country. It was communicated to me on a late tour of agricultural inquiry and observation, by Dr. Eliquant Lyman, of Lancaster, N. H. an intelligent and enlightened and practical farmer, whose crop of wheat usually averages from twenty five to thirty bushels per acre. It consists in the application of fine slacked lime to the wheat just at the time of its heading out and flowering, at the rate of about a peck to the acre.

It is sown broadcast upon the wheat while the dew is on it, and the field is rendered white with it—the best mode of applying it is with the hand, and for the person who sows it, taking his proper breadth or cast to walk backwards, so that he may not cover himself with the lime. It must be sown while the wheat is wet or the dew is on, and the philosophy of its application is very simple. The maggot of the fly is deposited between the grain and the stalk. It is, of course, an animal substance.—The lime, or alkali mixing with the dew is carried down upon it, and neutralizes and destroys it. Dr. Lyman has now tried this preventive three successive years, and has invariably, as he assures me, saved his crops, while those of his neighbors have been destroyed.

I visited at the same time, the field of a Mr. Bellows, in the same town, who had been advised by Dr. Lyman to make this application. The field consisted of several acres. He did it, it has proved successful, and what is strongly confirmatory of the value of this remedy, is the fact that a field of rye, belonging to Mr. Bellows, adjoining his wheat, and I think within the same enclosure, which was not limed, had been nearly destroyed by the fly.

They are certainly very important experiments, and I made no delay in presenting them to the public. Dr. Lyman has promised me a more particular account of the experiment and result, and likewise Mr. Billows, which, as soon as received, I shall be happy to communicate. I have received, indirect and indefinite communication, that

the same experiment has been successfully made in Gilmanton, N. H. but I have not yet been able to obtain either the name or details.

HENRY COLMAN.

Meadowbanks, Sept. 15th, 1835.

MARYLAND HORTICULTURAL SOCIETY.

SATURDAY, NOV. 7, 1835.

The following articles were exhibited, viz:

By Mr. Lewis Denning, of Chambersburg, Pa., a very large Beet, weighing 13 lbs. and resembling in form a *turtle*.

By Col. Wm. McClellan, Gettysburg, Pa., a very large Turnip and a large Beet.

By Mr. Thos. Kehoe, 7 stalks of Celery.

By Mr. James Stranoch, 2 very fine Cape Brocoli.

By Wm. G. Tilghman, of Talbot county, nine stalks of Corn, from four to six ears each. [It is the variety called twin corn, and has been improved in the number of ears on a stalk by selecting the seed every year from stalks having the greatest number of perfect ears. The ears are small, but very perfect. But the question whether the number of ears be not at the expense of their size; or rather, whether an acre of this kind of corn will produce more shelled corn than an acre of the common two eared kind, is the one most interesting to the public, and which we should be glad to see answered.]

By Mrs. Forney, 33 varieties of Chrysanthemums.

By Mrs. John Lester, a fine bouquet of do.

By Mr. Geo. H. Keel, 51 varieties of do.

By Mr. Samuel Feast, *Hybiscus Africana*, *H. Sinensis Striata*, *Cosmea bipinatifolia*, *Nerembergia*, *Mimulus Smithii*, *Verbena Melandris*, *Melastoma Malabitheca*, *Spigelia Marylandica*, *Vinca vulgaris*, *Arbutus unedo*, *Campanula rapunculoides*, *Auricula*, *Rosa mutabilis*, *Salvia cerulea*, *Angustifolia*, *Splendens* and *Camillia alba plena*. Mr. Feast also exhibited to the Secretary a new rose, which he calls the "Queen of Roses." It is a most beautiful addition to our already extensive list of roses. The petals are white, with a fourth to a half an inch of the outer edges bordered with deep pink. It is very double, the petals regularly arranged, incurved and open, shewing the beautiful white ground of the petals between the pink edges, somewhat like the *Queen of Dahlias* that has been so much admired the past season. It is supposed to be a cross between the tea and china rose.

At 12 o'clock the premium was awarded to James Stranoch, for his fine Cape Brocoli.

SATURDAY, NOV. 14.

The following articles were exhibited:

By Mr. Washington Hosford, of Baltimore co. two Turnips, weighing 11 lbs. 2 oz.

By Mr. Henry Troup, two roots of Mangold Wurzel, weighing 16 lbs. each, and measuring 28 inches in length and 21½ inches in circumference. [These were the finest roots we have seen this year. They were regularly shaped, and perfectly solid.]

By Mr. John Ridgely, of Hampton, ½ bushel of very fine Potatoes.

By Mr. Peter Coombs, 5 varieties of Corn, one doz. pomme d'api Apples and 6 very fine Pears.

GIDEON B. SMITH, Cor. Sec'y.

DOMESTIC SUMMARY.

Such is the happy influence of good roads, railroads and canals upon the value of property, that in every direction where they are made an appreciation is imparted that would seem to defy all the rules of sober calculation. As one among the hundreds of daily occurring examples we would name the following. Mr. David Shriver has recently sold 400 acres owned by him at the western termination of the Chesapeake and Ohio canal for \$180,000. Ten years ago this farm would not have brought ten thousand dollars. It has been sold to a company of gentlemen, who are now laying it off into streets, with a view of creating it into a town.

A large and respectable meeting of citizens of Belmont county, Ohio, was recently holden at the Court house in St. Clairsville, at which resolutions were adopted approving of the plan of extending the Baltimore and Ohio Railroad, from Cumberland to Brownsville, and from thence to Wheeling and Pittsburgh, declaring it an object of great national importance, and, requesting the representative in Congress from that district, to use his exertions to obtain an appropriation from the national government to ensure the successful extension of the road. Meetings of the citizens of different portions of Pennsylvania, Ohio, and Maryland have been held, at which delegates were appointed to meet a convention to be held at Brownsville, Pennsylvania, on the 25th inst. to devise measures for carrying this object into effect. At a meeting of the citizens of Baltimore held on the 19th inst. resolutions were adopted warmly in favor of the project, and a committee consisting of thirty of our most respectable citizens was appointed to proceed to Brownsville, to represent the city in said convention. A similar delegation has been appointed by Baltimore county.

Mr. Gay, the chief Engineer of the Susquehanna Canal from Columbus, Pa., to tide is now engaged in making a final survey of the first 12 miles of this important work, and the prevailing opinion is, that the canal can be made at a much less expense on the west than on the east side of the river.

The project of a railroad from the Ohio to Charleston, we are pleased to find meets with favor—and to every public work—to every medium of, or plan for, improving the various intercommunications of the country, we say in the sincerity of our heart—God speed the good work.

FOREIGN ABSTRACT.

Advices from Europe to the 10th of October have been received. The news is not important in a political sense. Disaffection to considerable extent prevails in the French army.

MARKETS.

LONDON, Oct. 9 Cotton. Sales are very considerable. The accounts this morning from Liverpool will, it is expected, produce a favorable change; 5,000 bags were sold on Wednesday at rather high prices. There are no purchases of Tobacco to report. There are no sellers of oil in this market, owing to the bad accounts received yesterday of the fishery; by to-day's accounts two more vessels were lost, crews saved. The dates are, however, only up to July, so that no accounts can yet be depended upon, but it looks very unfavorable.

HAVRE MARKETS.—From the 27th Sept. to 3d Oct. Cotton. The sales have continued on an extensive scale, and amount to 6,928 bales, viz: 2888 bales Louisiana, at 124 a 175; 1581 do Georgia and Florida, at 115 a 148; 1500 do Mobile, at 135 50a 156 50; 195 do Alabama, at 130 50a 145; 379 do Tennessee, at 120a 132. Cottons of superior quality still attract the attention of buyers, and some parcels have brought higher prices, but we do not change our quotations. We are without any direct

and recent intelligence from the United States, but the packet of the 8th Sept. is expected every moment. The accounts from the manufacturing towns continue favorable. Our stock may be estimated at about 45,000 bales.

CURE FOR "CHILLS AND FEVERS"—by one who has proved its efficacy.

1 oz. peruvian bark.
1 oz. cream of tartar.
1 oz. cloves.
1 pint port wine.

Take a wine glassful 20 minutes before each meal, and after missing the chills, continue to take a wine glassful before breakfast for 3 or 4 weeks.

THE SILK MANUAL.

JUST published and for sale by *Sinclair & Moore* and *Robt. Sinclair, Jr.*, at the *Maryland Agricultural Repository*, Light near Pratt street, Baltimore, a complete *Manual of the Silk Culture*, in which plain instructions are laid down for the culture of the Mulberry, the feeding of the Silk worms, management of the cocoons, reeling, spinning and dyeing of the Silk. In fine, it is a perfect Manual, and comprises every department of the business, and set forth in so plain and methodical a manner that every one can understand them and by a very few hours, attention become master of the business. It is clearly demonstrated in this Manual, that largely upwards of \$500 may be netted from an acre in the Culture, and it is a singular fact connected with the Mulberry as adapted to the making of Silk, that poor dry, sandy, or gravelly land suits it best, the fabric made from worms fed on leaves raised on such soil, being greatly superior in elasticity and richness of gloss to those grown on rich grounds.

Price—per copy 50 cents.

Liberal discounts made to the trade.

nov 24

MULBERRY TREES AND SEEDS.

100,000 Chinese Mulberry or Morus Multicaulis of various sizes at reduced prices.

150,000 White Italian Mulberry at very low rates by the 1000 or larger quantities.

200 lbs. White Italian Mulberry seed.

Also the following superior large sized trees which now form a Mulberry orchard—but must be removed:

2000 Chinese Mulberry 3 years old 7½ to 8 feet high.

2000 do do 2 do 5½ to 6 do

2000 do do 3 do and budded on the

White Mulberry which have proved to be much more hardy than those from cuttings.

These 6000 trees are the greatest acquisition that any silk culturist can possibly obtain, and there is not another equally valuable collection for sale in the Union, as those who have such will not part with them.

50,000 cuttings of the Chinese mulberry at reasonable rates by the 1000, &c.

The New Catalogues of Garden and Flower seeds are just published, comprising the largest assortment ever offered for sale, and including all the choice new varieties. Venders will be supplied in any quantities at very low rates and a liberal credit.

The subscribers will enter into contracts to supply any number of Chinese or White Italian Mulberries on very reasonable terms.

Fruit and Ornamental Trees of all kinds, Garden seeds, Bulbous roots, Green-house plants, and every other article promptly supplied and at very moderate prices.

N. B. Pear trees of large size.—Catalogues will be sent to every applicant.

Wm. PRINCE & SONS.

no 17

4t

FOR SALE.

A DURHAM Short-horn bull 15-16 blood. He is from a fine cow and got by Col. Povel's celebrated bull *Monk*—now two years old. Price, delivered at York, Pa., \$130.

Letters addressed to the editor *post paid*, will be attended to.

nov 10

2t

Printed by *Sands & Neilson*, N. E. corner of *Charles* and *Market* streets.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM.	TO.
BEANS, white field,.....	bushel.	2 50	—
CATTLE, on the hoof,.....	100lbs.	4 50	5 25
CORN, yellow,.....old, 95 to 100	bushel.	new 50 to 65	—
White,.....do 100 to 105	"	do 50 to 65	—
COTTON, Virginia,.....	pound.	18½	—
North Carolina,.....	"	—	—
Upland,.....	"	18½	20
FEATHERS,.....	pound.	37	40
FLAXSEED,.....	bushel.	1 25	1 37½
FLOUR & MEAL—Best wh. wh't fam.	barrel.	8 00	8 50
Do. do. baker's,.....	"	7 50	8 00
Do. do. Superfine,.....	"	6 75	6 87½
SuperHow. st. in good de'd	"	6 62½	—
" " wagon price,.....	"	6 50	—
City Mills, extra,.....	"	6 62½	—
Do.	"	6 37	6 50
Susquehanna, firm & scarce	"	6 12½	6 25
Rye,.....	"	4 50	4 62
Kiln-dried Meal, in hhds.	hhd.	19 50	20 00
do. in bbls.	bbl.	4 12½	—
GRASS SEEDS, red Clover,.....	bushel.	5 00	5 75
Timothy (herds of the north)	"	2 75	3 25
Orchard,.....	"	2 25	3 00
Tall meadow Oat,.....	"	2 00	2 50
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.	—	15 00
HEMP, country, dew rotted,.....	pound.	6	7
" " water rotted,.....	"	7	8
HOGS, on the hoof,.....	100lb.	7 00	7 50
Slaughtered,.....	"	—	—
HOPS—first sort,.....	pound.	12½	—
second,.....	"	10	—
refuse,.....	"	8	—
LIME,.....	bushel.	33	35
MUSTARD SEED, Domestic,.....	"	5 00	6 00
OATS,.....	"	40	42
PEAS, red eye,.....	bushel.	—	—
Black eye,.....	"	—	1 25
Lady,.....	"	—	—
PLASTER PARIS, in the stone,.....	ton.	—	3 50
Ground,.....	barrel.	1 25	—
PALMA CHRISTA BEAN,.....	bushel.	2 00	—
RAGS,.....	pound.	3	4
RYE,.....	bushel.	80	85
Susquehanna,.....	none	—	—
TOBACCO, crop, common,.....	100 lbs	5 00	5 50
" brown and red,.....	"	5 00	7 00
" fine red,.....	"	7 00	9 00
" wrappery, suitable	"	—	—
for segars,.....	"	5 00	10 00
" yellow and red,.....	"	8 00	12 00
" good yellow,.....	"	11 00	16 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"	4 75	5 00
" " ground leaf, ..	"	5 00	8 00
Virginia,.....	"	6 00	—
Rappahannock,.....	"	—	—
Kentucky,.....	"	8 00	14 00
WHEAT, white,.....	bushel.	1 45	1 50
Red,.....	"	1 35	1 44
WHISKEY, 1st pf. in bbls.	gallon.	37	37½
" " in hhds.	"	33½	—
" " wagon price,.....	"	30	—
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 50	—
To Wheeling,.....	"	1 75	—
WOOL, Prime & Saxon Fleeces, ..	pound.	62 to 75	32 to 34
Full Merino,.....	"	52	62 30 32
Three fourths Merino,.....	"	47	52 28 30
One half do.....	"	42	47 26 28
Common & one fourth Meri.	"	38	42 25 26
Pulled,.....	"	38	42 26 28

2,000 MORUS MULTICAULIS.

FOR SALE by *R. Sinclair, Senr.*, at *Clairmont Nursery*, 2,000 Morus Multicaulis trees (the Chinese Mulberry.) These trees are between 7 and 8 feet high, and if planted out this fall might be fed from to advantage next spring. Persons desirous of purchasing, would do well to make early application. Their superiority for feeding silk worms is universally admitted.

nov 24

2t

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured...	pound.	11	—
Shoulders,....do.....	"	10	—
Middlings,.....do.....	"	8½	9
Assorted, country,.....	"	7	8
BUTTER, printed, in lbs. & half lbs.	"	18½	25
Roll,.....	"	20	—
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old...	each.	3 00	6 00
Cows, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 75	1 87
CHOP RYE,.....	"	1 68	1 75
EGGS,.....	dozen.	—	—
FISH, Shad, No. 1, Susquehanna,	barrel.	7 75	—
No. 2,.....	"	6 75	—
Herrings, salted, No. 1,.....	"	4 00	4 12½
Mackerel, No. 3,.....	"	5 75	—
Cod, salted,.....	cwt.	3 00	35 0
LARD,.....	pound.	10	10

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	VIRGINIA.
U. S. Bank,.....par	Farmers Bank of Virginia 2½
Branch at Baltimore,....do	Bank of Virginia,.....do
Other Branches,.....do	Branch at Fredericksburg do
MARYLAND.	Petersburg,.....do
Banks in Baltimore,....par	Norfolk,.....do
Hagerstown,.....½a	Winchester,.....do
Frederick,.....do	Lynchburg,.....do
Westminster,.....do	Danville,.....do
Farmers' Bank of Mary'd, do	Bank of the Valley,....do
Do. payable at Easton,....do	Branch at Romney,....½
Salisbury,....5 per ct. dis.	Do. Charlestown,....do
Cumberland,.....½a	Do. Leesburg,....do
Millington,.....do	DISTRICT.
Washington,.....	Wheeling Banks,....1½a2
Georgetown, } Banks, ½.	Ohio Banks, generally 2½a3
Alexandria, }	New Jersey Banks gen. 1½a2
PENNSYLVANIA.	New York City,.....½a
Philadelphia,.....½a	New York State,....2½a3
Chambersburg,.....½a	Massachusetts,....2a2½
Gettysburg,.....do	Connecticut,....2a2½
Pittsburg,.....1½a2	New Hampshire,....2a2½
York,.....½a	Maine,.....2a2½
Other Pennsylvania Bks. 1½a2	Rhode Island,....2a2½
Delaware [under \$5]....3a4	North Carolina,....2½a3
Do. [over 5].....½a½	South Carolina,....2½a3
Michigan Banks,.....5a	Georgia,.....3a3½
Canadian do.....5a	New Orleans,.....4

A GREAT BARGAIN.

A full blooded Improved Durham Short-horn bull rising five years old, and his 3 sons from 1½ to 2 years old each, 7-8 bred, has been left with the editor of the Farmer and Gardener for sale. These are first rate animals, and would be sold a bargain, if application be made promptly.

All applications by letter must be post paid.
nov 17 3t.

TO AGRICULTURISTS—The analysis of Soils, marls, mineral waters, and other productions, interesting to those engaged in Agricultural pursuits, is performed with promptness and accuracy, by

TYSON & FISHER, Chemists,
no 3 Druggists, No. 192 Market street, Baltimore.

CONTENTS OF THIS NUMBER.

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THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

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THIS publication is the *successor* of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, DEC. 1, 1835.

THE FREDERICK SHEEP.

A subscriber inquires of us whether the sheep improved by that estimable gentleman, the late *Richard K. Meade*, of Frederick county, Va., are still preserved in their pure state, and if so, could any be purchased, and at what prices for rams and ewes respectively? Any gentleman having them for sale will oblige us by communicating the desired information. He will state the number of sheep for sale, and the price at which they will be delivered in Baltimore.

WHEAT CROPS DESTROYED BY THE CHINCH-BUG.

We learn by an esteemed correspondent, residing in the town of *Dardenne*, Missouri, that the *Chinch-bug* "completely and effectually destroyed many crops of wheat in that quarter, which had survived the severity of the winter and the scab." Can any of our readers furnish us with either a preventive or remedy.

The beautiful and scientific article upon *Geraniums*, which will be found in our columns to-day, is from the classic pen of the editress of that sweet little literary gem, "*The Passion Flower*"—a work of infinite taste and talent, and without which, none should be who love harmony of song and purity of style, or who can appreciate the lofty though chastened outbreakings of female genius.

THE SPIRIT OF IMPROVEMENT ABROAD!

We have received within the last few days from a distinguished agriculturist in the state of Pennsylvania, a letter in which we are highly gratified to find, that the people of that state are awakening to a lively sense of the importance of improving their stock of cattle, generally. And in this they evince not only their patriotism but their good sense and sagacity. Our correspondent says:

"Since I last wrote to you, my fields have been depopulated. My short horns are nearly gone. Farmers from our *Key-stone* state are becoming alive to the value of farm stocks of improved kinds, and apply to me from every part of the state for stock. One writes to me for a bull, another for cows full or part bred—another for sheep—another for pigs—another for horses of blood, and last but not least, I have several applications for the *White turkeys* and *Westphalian geese*. Every animal I had for sale with the exception of two or three are gone at my own prices."

The letter also informs us that he had sold his favorite cow for \$300—a large price; but not too large for the splendid animal in question, which, without doubt, is one of the finest cows ever raised in this or any other country. This is extravagant praise it may be thought, but not an iota more than is merited by her extraordinary excellence. The interest of her purchase money is but \$18 a year, and we think we can say in perfect safety that she would, in Butter and milk, at our market prices, nett a sum equal to the interest of \$3000, besides yielding a calf annually, which would be worth from \$100 to \$200, at twelve months old. This seems to invite a comparative statement between a common cow of the country and this or any other prime animal of the improved short horn Durham. We will assume that this cow gives 6 gallons of milk per day, we know that she yields from 16 to 20 lbs. of Butter per week, when fresh, and we will therefore take the average—and assume that the common cow will give 3 gallons of milk and make 6 lbs. of butter, which very few of them ever reach. These are the results when both animals are fresh in milk—say for 2 months, and for the balance of the milking year, say 9 months, allowing 1 month for each cow to be dry; immediately preceding their calving, we will assume that each will fall off, after the first 2 months, in their yield $33\frac{1}{3}$ per cent. From these premises we make out the following statement:

YIELD	
Of the Short-horn Durham above named as follows, viz:	
18 lbs. of Butter per week, $8\frac{1}{2}$ weeks, 153 lbs. at 25 cts.	\$38 25
6 gallons skimmed milk per day, during the above time, 60 days=1440 qts. at 3 cts. per quart,	\$43 20
Balance of the milking year, say $39\frac{1}{2}$ weeks, 12 lbs. of Butter per week=475 lbs. ($\frac{1}{3}$ being deducted from the	

rate of the previous product) at 25 cts. per lb.	\$118 75
Balance of the milking year, ($\frac{1}{3}$ yield being deducted) say 275 days at 4 gallons per day=1100 gallons or 4400 quarts skimmed milk, at 3 cts per qt.	\$132 00
Calf at the lowest assumed price,	100 00
	\$432 20

DEDUCT	
For feed of the above animal 365 days at 25 cts. per day,	\$91 25
For interest on her first cost, say \$300 at 6 per cent per annum,	18 00
	109 25
	109 25

Profit on the Short-horn Durham per annum,	\$322 95
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YIELD	
Of a common cow, as follows:	
6 lbs. of butter per week, $8\frac{1}{2}$ weeks, 51 lbs. at 25 cts.	\$12 75
3 gallons skimmed milk per day, during the above term 60 days=770 qts. at 3 cts. per quart,	23 10
Balance of the milking year, say $39\frac{1}{2}$ weeks, 4 lbs. of butter per week ($\frac{1}{3}$ being deducted from the rate of previous product)=148 lbs. at 25 cts. per lb.	37 00
Balance of the milking year ($\frac{1}{3}$ yield being deducted) say 275 days at 2 gallons per day=550 gals. or 2200 qts. at 3 cts. per quart.	66 00
calf,	6 00
	\$144 85

DEDUCT	
For interest on her first cost, say \$30	\$1 80
For feed 365 days, at 25 cts. per day,	91 25
	\$93 05
Profit on a common cow,	\$51 80

RECAPITULATION.	
Profit on the above short-horn Durham,	\$322 95
Profit on the common cow,	51 80

Clear profit in favor of the Short-horn Durham, \$271 15

If the above presents any thing like an approximation to an estimate of the yield of the above cow, and we believe that it is a fair representation, and for the following reasons:—1st, because her yield in butter when fresh is the ascertained aver-

age product, and we think that we have not carried the period of her freshness beyond the proper terminating point—2dly, because we think the deduction of one-third during the balance of the milking year is a liberal one—and, 3dly, because we believe that a cow which is competent to yield 20 lbs. of butter per week, will on a moderate calculation give 6 gallons of milk per day when fresh—and, lastly, we believe that a cow if properly fed with rich succulent food, may be so kept upon her milk as not to decrease more than 33½ per cent, on an average, during the remainder of the milking year. If then, we have given any thing like an approximation to an estimate, we think no one should hesitate upon the necessity of improving the native breeds of stock. We are aware that it is not a very fair way of stating a proposition to take an extreme case, and we admit that this is one, for the cow in question is a most extraordinary animal—we are aware too, that deep milkers of this character, are few, very few, in number; but then, we only hold it up to show what improvement is capable of doing with the cow kind, and how insensible the farmer is to his interest, who neglects to avail himself of the march of science in his own peculiar walks.

WORK FOR DECEMBER.

ON THE FARM.

The farmer or planter who understands his business, will have enough to occupy his attention this month, and although I would never have an agriculturist hurried I would always have him busy, and in order to prevent the one, and promote the other, I would advise that a memorandum book be kept, wherein all work desirable to be done should be set down a week in advance; by this kind of systematic arrangement, business will be conducted without confusion, and by proper attention to taking up the work, thus to be marked out, in regular succession, time will not only be gained, but great economy will be effected by having every thing done in the right time, and in the right way.

Have you a tool house, sheds for your wagons, carts, ploughs, &c.? If you have not, you should forthwith put them up, if they be but thatched ones; for rest assured, you will save more than their cost in a single season. Having thus premised the necessity of coverings for your implements of husbandry, we would recommend you to put them away, in order that they may be protected from the weather.

Have all your gearing well rubbed with a mixture of Seneca oil and Indian rubber, in the proportion of a pint of the former to an ounce of the

latter, cut up into shreds and permitted to dissolve. This mixture if well rubbed into them three times a year, will make one set of harness last as long as three usually do.

If your wagons, carts and other vehicles of burden or pleasure, ploughs, harrows, &c., require it, have them thoroughly repaired; and let us here admonish you, that if but a nail be out of place, have it driven home: attention to small matters begets the habit of being attentive to every thing.

Do you contemplate putting up any new fences? Do your old ones require mending? If you intend the first, and the latter is required, without further delay have your posts and rails cut down and hewed out, and have every thing necessary in this way done before the winter sets in with intensity. Before putting in your posts, char the ends to be placed in the holes, sufficiently long to let a portion of the burnt part be above the ground. Take the bark off of both posts and rails, and if possible, give them a white washing, which should be repeated every spring.

Cut your cord wood and have it hauled into your yard; have it cut short to suit your fire places and carefully piled up for use.

Attend to your orchards. Now is the time that you may with great advantage prune your healthy apple and pear trees of their redundant wood. Having taken it off carefully with a good saw, take a drawing knife and smooth the cut surface, and then apply a composition composed of 3 parts of tar, one part of sulphur, and one part of chalk, to be put on with a painter's brush. Many trees after being pruned are left with the cut surface exposed to the winter's rains, snows and frosts, and thus become cankerous and diseased.

If you have any trees that are diseased, you may help them by laying bare their roots and applying a slight dressing composed of tanner's bark, lime and unleached ashes in the proportion of 3 parts of the former, and 1 of each of the two latter articles, then covering the whole with the mould which was removed.

If you have young trees planted out, put some long manure around the roots, which should not be removed until late in the spring, putting a shovelful of fresh unslacked lime, underneath the manure, and around the trunk of the trees.

If you have any ground that you intend for corn or early potatoes, that is still unploughed, delay not another day, but turn it up—if stiff and clayey, plough deeply.

Be careful of your cattle; house them every night, not forgetting to let their racks, if you feed without cutting—be full—if you cut your hay, straw, fodder and corn stalks, which you should do, steam your provender and it will more than

repay you for the labor. Your milch cows, and and cows in calf, should be well attended to and receive free supplies night and morning of good warm slops composed alternately of corn meal, rye meal and roots. In each of the troughs in which you feed them, you should always have a large lump of chalk: once a week before putting in their slops, you should place in their troughs, to be licked by them, a mixture of salt and ashes; and if you live in a district where the cows are subject to fever or murrain, always keep in a corner of their feeding troughs a mixture of tar, salt and sulphur, in addition to the prescriptions above. If you find your animals labouring under a difficulty of urinating, or that their urine is charged with bloody matter, mix with their food at each meal, about 2 ounces of the flowers of the Yarrow, with the fourth of an ounce of salt-petre, for three or four days in succession, and give a bolus of 1 ounce of castile soap twice a week until the symptoms disappear, taking care to keep the animals housed, and well supplied with comfortable litter. Let the stalls and stables be cleaned and white-washed. The messes in which the yarrow and salt-petre are given should be warm.

Your cow when near calving should have good warm well bedded quarters, where she will be undisturbed, to calve in, and soon after giving birth to the calf, a handful of salt should be thrown on either side of it, which the mother will lick off and be thus aided in her yearning. The mother should also be given a little warm water in which a few handfuls of meal should be thrown. This should be repeated every half hour during the first day, and she should receive nourishing slops afterwards, in small quantities, frequently, say 4 or 5 times a day during the first week. If she does well, in a week after calving, she should receive her meals three times a day, morning, noon, and night, at each of which times, the calf should be let suck.

Push on the fattening of your hogs and beeves, and get them to market or in your pickling tubs, as speedily as possible. The sooner you get such work done, the more leisure you will have to devote to the hundred other things which will claim your attention.

If your corn is not housed, you should lose no time in having it done. If your small grain is in the straw, have it thrashed out, and if, of either, you should have any to sell, dispose of it as soon as possible.

If you have a field infested with garlic, plough it up, and expose the roots of the pest to the frost.

Having attended to every thing proper to be done on the farm, in the way of business and la-

bor, prepare for the enjoyments of winter. Rig up a sleigh for the accommodation of your lady and your children; for though from a sense of the necessity of the case, we say to the agriculturist, "*business first*,"—that having been attended to,—we are the advocate of rational pleasure. Life without some relief from the dull monotony of daily toils, would, indeed be a wearisome and unchequered road, which would bring no delight to the soul. Variety, in the language of minstrelsy, carries its charms to the heart, and why should not the tiller of the earth, after he has fulfilled his duties faithfully, indulge those, for whom his heart yearns with all the fondness of a husband and the affection of a father, in the enjoyment of those sweet, because virtuous pleasures, which are to be found in the intercourse of neighbors and friends—in those innocent amusements which go with such unalloyed pleasure to young and ingenuous hearts,—which so enliven the festive board and fill the parental bosom with delights which the imagination may conceive, but which the pen cannot pourtray. If you be a parent, you can embody in your mind what we mean, though you may not be able to explain it to your neighbour; for you have often felt those exquisite sensations to which we allude, when your children have manifested by their joyous countenances that *they were contented and happy*.

IN THE KITCHEN GARDEN.

If you have a well conducted and well arranged kitchen garden, (and if you have not one, you should not longer be without one) and have not yet secured your root vegetables and cabbages from the first, do so while the weather is still open to do so. If your Asparagus beds have not yet been dressed up for the winter, you may still do so to advantage: but take our word for it, that unless you give them comfortable top-dressings and protect them from the chilling effects of the winter's snows and frosts, you need not expect your table next spring to be graced with this luscious vegetable in perfection.

Your cauliflower and cabbage plants that are under frames should be aired through the middle of the day. Your lettuce on warm borders should be covered by matting at night, and through such days as are very inclement; the matting to be raised so as to afford light and not to crush the plants.

As there will be time for such work, you can cause your pea-sticks and bean-poles to be gathered from the woods, trimmed and put away for use in the spring.

In such parts of the south, where the frosts are

slight, you may sow on warm borders, small parcels of parsnips, carrots, onions, beets, raddish, lettuce, spinach and parsley, for early crops. And in almost any part of the United States, you may sow on hot beds.

IN THE FLOWER GARDEN.

If your more delicate roses of the hardy kinds as the Grevillii, Champneyanas and Noisettes are, in exposed situations, you had better tie them up and cover them with matting or plaited straw; the roots to receive a warm dressing of long stable manure.

Your beds of tulips, ranunculuses, anemones, hyacinths, auriculas, carnations, polyanthus, and double primroses must be protected.

Anemone, Ranunculus, Auricula, Polyanthus, and Cyclamen seeds, may be sown in hot-beds.

If you should not have finished planting your bulbous roots and the weather should remain open, you may plant Narcissus, the star of Bethlehem, crocuses, snowdrops, hyacinths, jonquils and tulips.

Any newly planted shrubs and trees should be well protected with long litter. You may also prune your hardy garden trees and shrubs.

A NEW IMPORTATION OF CATTLE.

We went on Friday last to see a lot of cattle imported into this country from England by the Rev. J. A. Robertson, A. M. They consist of a young bull of the Durham short-horn improved breed, a heifer of the same breed, a cow of the Ayrshire breed, and another cow, a cross between the Durham and Ayrshire.

The bull is a beautiful red and white, cleanly built, very large of his age, with remarkably muscular knees, straightness of back, depth of chest, and breadth of loins, with buttocks and thighs which indicate that his career will be a proud one, and that if not cut short in his labors before he becomes acclimated to the climate of Virginia,—that land of intellect and patriotism, whither he goes,—he will add much to the fame of the Old Dominion, in the improvement of her stock.

The Durham heifer is a beautiful roan, now 3 years old, in calf with her second calf. A creature of great size and most perfect symmetry, worthy in all respects of the companionship of her lusty lover,—who stood so gracefully by her side,—the gallant Young Buckingham.

The Ayrshire cow is a light red and white, a most compact square built animal, with large protuberant hips, udder of ample volume, short legs, thin tapering neck, rather thick at the shoulders, and small head and horns, bespeaking at once her high breeding and capacity for deep milking.

The last cow, is a red, and as we have before observed, a cross between the Ayrshire and Durham improved short-horn, a most excellent evi-

dence of the happy commingling of the blood of Scotiz's pride with England's boast. This cow yields better than a pound of butter a day.

Mr. Robertson, the enterprising gentleman, who has imported these noble animals, is an Englishman by birth, a minister of the Protestant Episcopal Church of England, and a graduate of Oxford. Though he was born in England, he is the son of a Virginia gentleman, and comes to the land that gave birth to his venerated parent with a view of making it his permanent residence. He has visited America before, spent considerable time in Virginia, where he has bought an estate, and whither he proceeded on Friday last with his family, to take up his abode. He spoke with all the enthusiasm which animates an enlightened head and generous heart, of the hospitality he experienced during his former visit and sojourn in Virginia. As an American we felt the chord of affection "discoursing most excellent music," and our pride of country elevated as he poured out, with that eloquence which sincerity always imparts to the guileless tongue, his praises in behalf of the land to which Americans may point, as the seat of chivalry and the home of men, who carry "their hearts upon their sleeves for daws to peck at." But this is a theme which leads us astray, and we must apologise for the digression, and return to Mr. Robertson.

He brings with him also, five English pheasants, with their rich and golden plumage—a present from the Marquis of Winchester. He has brought them with a view of propagating their breed in Virginia. We wish he may have more success than our own public spirited fellow-citizen, the late Robert Oliver, whose munificence in acts connected with the improvement of the stock of the country, and the introduction of fine animals into it, were as comprehensive and unbounded, as were his fortune ample.

These are the pedigrees of Mr. Robertson's cattle:

Bull Young Buckingham.—Calved March 24th, 1834, by Col. Craddock's Buckingham, Dam by Scipio, g. d. by old Stephen.

Scipio and Stephen were the property of Mr. Charge, one of the most eminent breeders in Durham. See Herd Book.

Stephen was directly descended from *Comet*, which was sold for 1600 guineas. *Old Buckingham* won the *Barnard Castle* prize in Durham, and was got by *Ephygum*, dam by *Young Rockingham*, g. d. by *Wonder*. *Ephygum* was by *Old Rockingham*, and won a premium in Manchester.

Young Buckingham cost \$400, and his owner assured us he would not take \$1,200 for him.

Heifer Cowslip, also raised at Darlington, now 3 years old, got by Architect, dam by *Rob Roy*, g. d. Mr. Thornton's George, g. d. d. Burdon. Architect was got by *Highflyer*; dam *Lady Brough*, a celebrated cow, sold at Mr. Wytham's sale, of Darlington. See Herd Book.

Highflyer was sold to Capt. Davis, at Mr. Mason's sale, of Chilton, for 210 guineas, *Rob Roy* was a first rate bull of Col. Craddock's. *Cowslip* is now in calf by *Young Buckingham*.

Virginia, a light red and white, imported by the most noble the Marquis of Westminster, from Ayrshire, in April 1831, she was then 15 months old. She is of the stock of Mr. Aiton.

A Red Cow, Beauty—4 years old, a cross between the Ayrshire and Short horn, and yields upwards of a pound of butter a day.

A word as to the general character of the *Ayrshire* cows. Mr. Aiton, the very best English authority, says: "The quantity given by the Ayrshire cow, considering her size, is very great. Five gallons daily, for two or three months after calving, may be considered as not more than an average quantity. Three gallons daily will be given for the next three months, and one gallon and a half during the succeeding four months."

Of the quality of the milk of Mr. Robertson's Ayrshire cow, we can speak advisedly, having drank freely of it, and suffered it to accumulate cream, which it afforded in great richness and large quantity.

Mr. Rankine, the author of an excellent report of a Kyle farm, in speaking of the Ayrshire cows, states that "he has seen 18 Scotch pints (equal to 9 gallons) drawn from a cow in one day"—and that he "had a three-year old quay, that once for six weeks after calving gave 14 pints (7 gallons) a day."

We mention these facts to shew that this Ayrshire stranger, of Mr. Robertson's, brings proud claims with her to commend her to the kind attention of American farmers.

"ENCOURAGEMENT FOR SILK GROWERS."

Extract of a letter to a gentleman in this town, dated October 16, 1835. One observation we have made in regard to the product of leaves of the plant (Chinese Mulberry) which I think worthy of notice. We set last spring 1500 cuttings, about 1000 started and grew well, but the dry weather affected them much; the ground on which they stand is by no means rich, it would not yield 20 bushels to the acre. From 100 of these young plants, which we considered below an average, we gathered 55 pounds of leaves, giving, at the rate they were set, about 8000 to the acre, sufficient to make at least 100 lbs. of silk. From 100 trees (or roots) that were started the year before, we gathered 150 pounds of leaves; the same number per acre would give us 21,000 pounds of leaves, from 275 to 300 pounds of silk.

From the manner we cultivate those trees, we are satisfied, that an acre can easily be made to produce at the same rate. We shall try the experiment next season, with one acre of cuttings—and one acre of trees (with roots) started the past season.

Northampton, Nov., 1835.

We have extracted the above from the *Northampton (Massachusetts) Courier*, with a view of making some remarks upon the statements and facts it contains. The success attending the growth of the cuttings is highly satisfactory, and should encourage the culturists to freely use this mode of propagation, nor is the yield of leaves less so; we are however surprised to hear an extensive culturist talk so much at random, as to say that 8,000 trees yielding in the proportion of 55 pounds of leaves to the 100 trees,

would "make at least 100 lbs. of silk." They will do no such thing. The proportion of food consumed by worms has been long and well established by the observation and weighing, of the most experienced silk growers in Europe, and has been corroborated by the experience of our own country. Fifty pounds of foliage serve 1000 worms throughout the feeding season. Let us then apply the test of figures to the assumption above. As 100 of the trees yielded 55 lbs. of leaves, so will 8,000 yield 4,400 lbs. Now then, as 50 lbs of leaves will feed 1000 worms, so will 4,400 lbs. feed 88,000, and, as on an average 3,000 worms, or cocoons, make a pound of silk, so will 88,000 make 29 1-3 pounds, and not 100 lbs. as stated.

Again—"from 100 trees started the year before," the writer gathered "150 lbs. of leaves"—and he asserts, that "the same number (of trees) per acre would yield 21,000 lbs of leaves, or from 275 to 300 lbs of silk." Neither of these conclusions are justified by all past experience of the silk culture; the first is wrong from his own premises, as a statement of the naked proposition will shew. As 100 trees give 150 lbs. of leaves, 8,000 trees will give 12,000 lbs., and not 21,000 as set down. Here at once is an error of 9,000 pounds, which upsets the subsequent calculations; but then supposing, that they would yield 21,000 lbs., that quantity would not support the requisite number of worms to make the quantity of silk affixed; for according to our data, 21,000 lbs. of leaves will only feed 420,000 worms, and that number is only competent to make 140 lbs. of silk. But if we take the actual yield according to his own shewing, it is but 80 lbs. of silk, as will be explained by simply stating the propositions which result in the solution of the questions involved: as—if 50 lbs. of leaves will feed 1,000 worms, so will 12,000 feed 240,000 worms, and if 3,000 worms, (or cocoons,) make a pound of silk, so will 240,000 worms make 80 lbs. of silk, which is equal to \$320, to be raised from an acre of trees but one year old. However much this practical culturist is at fault in his calculations, or deductions from his premises, the latter are indeed encouraging, shewing as they do, that the *morus multicaulis* may be profitably fed the first year. The distance however at which he placed his trees, being but about two feet seven inches apart, is too close for a permanent plantation, though it might answer as a nursery or temporary setting out—in the hedge form, as a permanent orchard, less than three by six feet should not be thought of. At that distance the plants would ultimately give much more leaves, than at the confined space spoken of by the above writer, and we believe further, that a million of worms might be fed from an acre thus planted, on and after the fifth year, which would nett more than his maximum yield of silk.

We have not made these remarks with any invidious intentions or views; for in sincerity and truth, we were highly pleased to see the extract of the letter, notwithstanding the crudity of its affirmations; but as we feel a lively interest in the success of the culture, we were reluctant to let a statement so replete with errors, unintentional no doubt, but nevertheless errors, go abroad uncorrected.

GERANIUM.—*Pelargonium*.

Pelargonium L. from the Greek for *Stork*, in allusion to the beak of the fruit resembling the beak of that bird, as well as to preserve an analogy with the *Geranium*, or *Crane's bill*,—the Greek word *Γερανιον* signifying a crane.

Pelargonium embraces what are commonly known by the application of *African Geraniums*, and which, doubtless constitute a genus clearly distinguished from the *European* and *American Geranium*, by the irregularity of the flower, and its tubular nectary, to say nothing of the number of stamens.

It is the *African Geranium* that is most generally cultivated in our Green houses, for the beauty of its flowers, and the fragrance of its foliage.

The *Crane's bill Geranium*, is of the same class and order as *Pelargonium*, except that it has ten stamens, *Decandria*, instead of seven, *Hepandria*.

The *Crane's Bill Geranium* introduced into this collection, is the *Geranium Maculatum*, or spotted *Crane's bill*. An American plant of such highly medicinal virtues as to recommend it to our attention, and which ought to be in every garden, being esteemed the best known *styptic* in the whole *Materia Medica*, having produced wonderful cures when applied to wounds or ruptured blood-vessels. It has not much beauty to recommend it, yet its retiring and modest worth so generally overlooked in the gay saloon, may well be supposed to excite something like envy of its more favored rivals.

The *Geranium Maculatum* may be found abundantly in our meadows and woods. The one with purple flowers has downy leaves and five lobes or scollops and these divided into small indentures. The leaves of the blue are wrinkled and divided deeply into many parts or fingers. The stalks supporting the delicate blue flowers, are long and slender, from six inches to a foot high. They both have a flower, with a single cup or calyx, of leaves. Corolla, of five petals; ten stamens, alternately longer and shorter; one pointed, terminated by five stigmas. Fruit, five dry berries, furnished with a bill, each containing a single seed, crowned with a tail or awn, which rolls in a spiral form, when the seed becomes ripe. The root, which is the part used medicinally, is generally crooked and knotty, blackish or reddish on the outside, with a roughish taste or aromatic flavor.

Hemlock-leaved and Musk Crane Bill, of this genus, have but five stamens.

The general character of the *Pelargonium* is a *Perianth*, inferior, in deep, oblong, permanent segments, the uppermost elongated at the base into a nectariferous tube, running down the flower-stalk. Petals, five, irregular, oblong, spreading; longer than the calyx. Filaments, ten, unequally; three of them, rarely five, abortive. Fruit, beaked, of five aggregate capsules, each tipped with a long spiral awn, bearded on the inside. The foliage, of the different species is too varied and multifarious for description, and too well known to require it. We will therefore take our leave of

—Gentle geranium,

With a leaf for all that come.

HUNT.

There are said to be eighty-two species of the geranium; thirty-two of the *Crane's Bill*, only five of which are natives of the United States.

ON THE USE OF LIME AS A MANURE.

By M. PUVIS.

Translated for the Farmers' Register from the *Annales de l'Agriculture Française*, of 1835.

CONCLUDED.

Various qualities of lime.

38. The fertilizing effect of fallow, of ploughing, of moving and working the soil, prove still more that all these circumstances determine the formation of fertilizing principles, and probably of saline principles, in all the parts of the soil which receive the atmospheric influences.

But salts are also formed in plants. The nitrate of potash, which takes the place of sugar in the beet—the oxalate of potash, so abundant in sorrel—the carbonate of potash in fern, in the tops of potatoes, and in almost all vegetables in the first period of their life—the sulphate of potash in tobacco—the nitrate of potash in turnsole and in pellitory—prove, without reply, that vegetation forms salts, as it forms the proper juices of plants, since the soil contains the one kind no more than the other. But can we say where plants take the elements necessary for all these formations?—They can take them only in the soil by means of their roots, or in the atmosphere—in the soil, which would itself take them in the atmosphere, in proportion to the consumption of plants—or directly in the atmosphere, by means of their leaves which would there gather these elements. And if the analysis of the soils, and of the atmosphere, show almost none of these elements, it would be necessary to conclude from it, that the substances which analysis has found there, are themselves, or would furnish, if decomposed, the elements of the saline substances, although science may not yet have taught us the means of reaching that end.

39. The formation of lime, like that of the saline principles necessary to plants, is an operation which employs all the forces of vegetation—and these forces, directed to this formation, have no energy left to give a great development to plants: but when the vegetable finds the calcareous principles already formed in the soil, it makes use of them, and preserves all its forces to increase its own vigor and size.

It would then result, from all that has been said, that lime modifies the texture of the soil—makes it more friable—invigorates it—renders it more permeable—gives it the power to better resist moisture as well as dryness—that it produces in the soil the humate of lime which encloses a powerful means of fertility—that lime increases much the energy of the soil and of plants to draw from the atmosphere the volatile substances of which plants are composed, oxygen, hydrogen, carbon and azote—that the limed soil, in furnishing to plants the lime which they need, relieves the soil and plants from employing their powers to produce it—and finally, that lime promotes the formation of fixed substances, earthy or saline, necessary to vegetables. All this whole of reciprocal action and reaction of lime; on the soil, plants and atmosphere, explains in a plausible manner, its fertilizing properties. We would, consequently, have nearly arrived at the resolving of an important agricultural problem, upon which were accumulated all these doubts.

The amount of lime taken up by vegetation.

40. The ashes of plants from calcareous soil

or those which have been made so by manures, contain 30 per cent. of the carbonate and phosphate of lime, which, by taking off the crop, is lost to the soil. But the product of limed land of middle quality, is during the two years of the course of crops, about 20,000 lbs. of dry products to the hectare, which contain a little less than a hectolitre of lime in the calcareous compounds of the ashes. The vegetation has then used half an hectolitre a year. But we have shown that there was necessary, on an average, three hectolitres per hectare, each year. Vegetation then does not take up, in nature, but a sixth of the lime which is given profitably to the soil: the other five-sixths are lost, are carried away by the water, descend to the lower beds of earth, are combined, or serve to form other compounds, perhaps even the saline compounds, of which we have seen that lime so powerfully favors the formation. Another portion also, without doubt, remains in the soil, and serves to form this reserve which in the end, dispenses, for many years, with the repetition of liming.

Of the exhaustion of the soil by liming.

41. "Lime," it is said, "only enriches the old men: or it enriches fathers, and ruins sons."—This is indeed what experience proves, when, on light soils, limed heavily, or without composts coming between, successive grain crops have been made without rest, without alternations of grass crops, or without giving to the soil alimentary manures in suitable proportion. It is also what has happened when magnesia, mixed with lime, has carried to the soil its exhausting stimulus. But when lime has been used in moderation—when, without over-burdening the land with exhausting crops, they have been alternated with green crops—and that manure has been given in proportion to the products taken off—the prudent cultivator then sees continue the new fecundity which the lime has brought, without the soil showing any sign of exhaustion. No where has there been complaint made of argillaceous soil being damaged by lime; and the productiveness of light soils is sustained, in every case that the lime was used in compost.

In America, where the lime of oyster-shells has taken the place of that of magnesian limestone, the complaints of the exhausting effects of lime have ceased.

*Healthiness given to the soil and to the country by calcareous agents.**

42. The unhealthiness of a country is not caused by the accumulation of water, nor from soil being covered by water. Places on the borders of water do not become sickly but when the

*There was no position in the *Essay on Calcareous Manures* which its author assumed with so much hesitation as the agency of those manures in removing causes of disease. That hesitation did not arise from doubt of the truth of the position—but because of its very high importance, and its entire novelty—its being then sustained but by few known facts furnishing direct evidence, and by no known authority whatever of earlier writers. It is therefore the more gratifying to find in the work now presented, that about the same time, another and far remote investigator of the same subject, by a different course of reason-

water has quitted some part of the surface which it previously overflowed, and the summer's sun heats the uncovered soil, and causes the decomposition of the remains of all kinds of matter left by the water, and contained in the upper layers of the soil. Thus, ponds are not unhealthy, but when drought, by lowering the waters, leaves naked extensive margins, to be acted on by the sun and air. In rainy years, fevers on the borders of ponds are rare.

Epidemic diseases most often arise on the borders of marshes laid dry—in the neighborhood of mud thrown out of ditches or pits—and in the course of bringing new land into cultivation, where the ploughed soil is for the first time exposed to the summer's sun. In the interior of Rome, the vineyards, the gardens are remarkably unhealthy—while the sickliness disappears where the emanations from the soil are prevented by buildings. In the Pontine marshes, they cover the dried parts with water to arrest the danger of their effluvia. It is then from the soil, and not from the waters at its surface, that insalubrious emanations proceed. Waters placed on the surface, always in motion, agitated by every wind, are not altered in quality, and do not become unhealthy: but whenever they are contained in some place without power to receive exterior influences, or to have motion, they are altered in their odor, taste, and consequently injured in relation to health.

Whenever water then, without covering the soil, penetrates the upper layer without being able to run through the subsoil, it remains without motion, and stagnant, within the soil—is changed by the summer's sun, serves to hasten the putrefaction of the broken down vegetable remains in or on the mould, and the exhalations from the ground become unhealthy. Thus are all drained marshes, of which the surface only is dry, while the water still penetrates the subsoil—thus, all the margins of rivers which have been covered by recent inundations of summer, are unhealthy: thus also, (for a great and unhappy example) the argilo-silicious plateaux, whenever the closeness of the subsoil does not let the water pass through, produce, in dry years, at the close of summer, emanations which attack the health of the inhabitants.

43. But this unhappy effect appears almost nowhere in calcareous regions: the margins of lakes and ponds there situated do not produce the same unhealthiness, and even the marshy grounds there are less unhealthy.

The waters which spring out of, or run over calcareous beds, are always healthy to drink. The borers of Artesian wells are anxious that the waters which they obtain to be good, may come out of the calcareous strata which they go through. When the waters which hold carbonate of lime in solution in carbonic acid* run over the surface,

ing, and by different proofs, had arrived at precisely the same conclusion—and that he maintains even more generally than the former work, the important and sure effects of calcareous manures in rendering a country more healthy.—*Ed. Far. Reg.*

*As in limestone water, lime with the greatest proportion with which it can combine of carbonic acid, (forming super-carbonate of lime,) is solu-

they give health to the meadows, in changing the nature and quantity of the products.

Linnaeus thought that the unhealthiness of most countries depended on the nature of the water, and was owing to the argillaceous particles which they contain; now these argillaceous particles are always precipitated by the calcareous compounds. For this reason, the waters which stand upon, or run over marl, or calcareous rock, are almost always limpid and clear, because the argillaceous particles have been precipitated by the effect of the solution in the water of the calcareous principle, which is itself dissolved by an excess of carbonic acid.

We are not far from believing then, that throwing rich marl, or limestone, into a well of muddy and brackish water, might have the effect, in part at least, of clearing it, and making it healthy to drink. This remedy, if it should not be as useful as we think, at least could not produce any injury.

Lime, in all its combinations, destroys the miasmata dangerous to life. Its chloride annihilates all bad odors, arrests putrefaction, and in short, has subjected the plague of Egypt to the skill and courage of Pariset. The white wash of lime upon infected buildings, upon the walls and mangers of stables, is regarded as serving to destroy the contagious miasmata of epidemic and epizootic diseases.

Lime destroys the plants of humid and marshy soils, and makes spring those suitable to better soils; then its effect is to give healthiness or vigor to the soil, to dry it, and make it more mellow and permeable. The water then is no longer without motion, and altered consequently in its condition. The limed soil then, to the depth it is ploughed, ought to change the nature of its emanations, as well as its products: and if the lower strata or subsoil, send up emanations, these effluvia in passing through the improved layers of soil, where the calcareous agent is always at work, and developing all its affinities, ought also to be modified, and take the character of those of the upper bed. The limed soil then, it would seem, ought to be made healthy.

But what we maintain here by induction, by reasoning, is fortunately a fact of extensive experience. Among all the countries in which lime has carried and established fertility, there is not cited, that I know of, a single one where intermittent fevers prevail—while that they have not disappeared in the country even where an active culture draws good products from the impermeable argillo-silicious soil.

44. To extend the great benefit of healthiness to the whole of a country, it is no doubt necessary that the whole country should receive the health-giving agent. However, on every farm, in proportion as liming is extended over its surface, the chances of diseases will be seen to diminish—and the healthiness of the country will keep pace with the progress of its fertility.

able in water. The excess of acid is lost by heat, by exposure to air, &c., and then the lime is in the form of carbonate—and being insoluble in water, falls separate to the bottom.—*Ed. Far. Reg.*

Result of the use of improving manures on the soil of France in general.

45. Three-fourths of the whole territory of France, to be rendered fruitful, have need of calcareous agents. If the third of this extent has already received them, (which we believe is above the truth,) upon the other two-thirds, or the half of the whole, the agricultural products, by this operation, would be increased by one-half or more, or one-fifth of the total amount. But agriculture, in enriching itself will increase its power, its capital, and its population, and will naturally carry its exuberant forces, its energy and activity to operate on the greater part of the 7,000,000 of hectares of land now [*en friche*] untilled, waste, and without product. By bringing these lands into cultivation and fertilizing them by lime or by paring and burning the surface, they would be made to yield, at least, one-sixth of the total product. The gross product of the French soil, then increased by a third or more, might give employment and sustenance to a population also one-third greater than France now possesses; and this revolution due successively to the tillage of the soil, to annual improvements keeping pace with the progressive increase of crops, would be insensible. The state would grow in force, in vigor, in wealth, in an active and moral population, which would be devoted to peace, and to the country, because it would belong to this new and meliorated soil. And this great result would be owing simply to applying calcareous manures to the extent of the soils of France which require them!

46. Upon our extent of 54,000,000 of hectares, our population increased to 44,000,000, would have for each, one hectare and a quarter, and would be less confined than the 24,000,000 of inhabitants of the English soil, who have only one hectare to the head; and yet our soil is at least as good, and it is more favored by climate. And then our neighbors consume in their food, at least a fourth or fifth of meat, while only one-fifteenth of the food of our population consist of meat; and as there is required twelve or fifteen times the space to produce meat as bread, it follows, that twice the extent of soil is necessary to support an Englishman as a Frenchman. Hence it results, that with an increase of one-third, our population would still have a large surplus product which would not exist in England, with an equal increase of population and equal increase of products of agriculture.

But this prosperity of the country, (yet far distant, but towards which however, we will be advanced daily)—would be still much less than in the department of the North, where a hectare nearly supports two inhabitants. And yet they have more than a sixth of their soil in woods, marshes, or unproductive lands: they have besides, another sixth, and of their best ground, in crops of commerce, which consume a great part of their manure, and which are exported almost entirely. This prodigious result is, without doubt, owing in part to a greater extent of good soil than is found elsewhere; but it is principally owing there, as well as in England, to the regular use of calcareous manures. As we have seen, more than two-thirds of this country [the North] belongs to the class of soils not calcareous, to the argillo-sili-

cious plateaux, and makes use of lime, marl, or ashes of all kinds.

47. After this great result of increased productiveness, that upon health, although applied to the least extents of surface, would be most precious. Upon one-sixth of our country the population is sickly, subject to intermittent and often fatal fevers, and the deaths exceed in number the births. Well! upon this soil without marshes, calcareous manures would bring a growing population, more numerous than that of our now healthy parts of the country—and as labor would offer itself from every side, these regions, made healthy, would soon be those where the people would be most happy, the richest, and the most rapidly increasing in numbers.

48. If we are not under an illusion, the calcareous principles and its properties upon the soil, form the great compensation accorded by the Supreme Author to man, in condemning him to till the earth. Three-fourths of our soil seem not to produce, except by force of pain and labor, the vegetables absolutely necessary for man. On all sides, and often beneath this surface so little favored, is found placed the substance necessary to the soil, to render it as fertile as the best ground, to enable the cultivator to use for his profit the vegetable mould which it contains and has been accumulating for ages—and to cause the entire soil to be covered by a population active, moral, and well employed. And this precious condiment, this active principle of vegetation, is only needed to be applied in small proportions, to obtain products of which the first harvest often compensates for all the labor and expense. And to complete the benefit, insalubrity, which afflicts the infertile soil, disappears; the new population finds there at the same time strength, riches, and health. There, without doubt, is one of the most happy harmonies of the creation, one of the greatest blessings with which the Supreme Author has endowed the laborious man who is devoted to the cultivation of the earth.

ISABELLA WINE.—There are very many persons in this city and its neighborhood, who might make from the vines on a single house lot a quantity of wine, besides having grapes enough for family use. If they have not got a better mode of making wine, we recommend the following, which we know by experience will make excellent wine.

To make Isabella Wine.

1. Crush your grapes without breaking the seed.
2. Pour the whole into a barrel or vat and cover with a blanket.
3. After standing 3 to 6 days, and fermenting, draw off from the bottom as long as it runs clear. This is your best.
4. Press all the *musk*, and this will be second best.
5. Immediately add any kind of cheap sugar, 3 pounds to the gallon. This must be done immediately after the pressing, and before it ferments.
6. Put the liquor and sugar into your barrels, cask, or demi-john (according to the quantity you make) and fill it *exactly full*, and as it ferments let the froth and impurities flow over the bung.

7. When it has done throwing off impurities draw it off from the lees, and put it into clean casks. Let a small vent hole be left, and suffer it to ferment until it arrives at the desired purity and taste.

8. Fine it with ising glass, or eggs and sand.
L. I. Star.

A GOOD THING.

Major Noah, who has always been distinguished for saying good things, has made a most excellent picture below. Had he been employed by the entire press of the United States for the purpose, he could not have drawn a more graphic sketch. But we leave the reader to read and digest for himself:

[From the New York Evening Star.]

Pay the Printer.—It is quite pitiable, we declare, in opening many of our country papers to see the oft repeated and imploring request, to “pay the printer,” and the earnest assurance that he will take wood, butter, eggs, candles, poultry and pigs in payment, and if we in the city were not ashamed at the inconvenience of looking so poor, we would make proclamation to the same effect; indeed, we should all be thankful to the delinquents at least, if they would commute for butter and eggs—chickens, corn and oats. It was but the other day, that ten or twelve Southern subscribers, not having the conveniences of Nicholas Biddle’s “monsters,” sent us a little bale of cotton to liquidate arrears, and if they were all to club in this manner, we should be in clover as well as in cotton. Really and truly, it is lamentable for an Editor to look over the list of his delinquent subscribers—it is enough to make the tears come into his eyes at the ingratitude of mankind; to think how daily and nightly he has to labour, to pluck out his brains like bird lime, to scour the city and the mail papers for news—to keep his scissors and pen in incessant employment, and to shin it in Wall street for the needful to pay for printing paper, ink, compositors, rent, carriers, devils and so forth, and then at the end of a six months probation to be told, “call again to-morrow,” “*iterum ad que iterum*,” until the poor printer says “I’ll take pork and molasses, apples or cider—cod sounds or mackerel in payment.”—The amount due the printer from each individual is frequently so small, that he who pays thousands and tens of thousands daily, deem it of too trifling an import to lose time in paying a five dollar note, but the aggregate of these small payments make up the sum total of the printer’s hopes. But the most unconscionable of all delinquents, are those who living by public patronage, are constantly calling on the printer to puff their small wares, and constantly forgetting to pay their bills. Pocketing thousands with the aid of the Press and yet allowing the Press to be the last in the calendar of payment. We should at a rough guess, say that there is not less than \$300,000 due the daily press in this city on old accounts. What a merry Christmas the proprietors would enjoy if the whole of these arrears was to come in—with what sincerity they would drain the goblet to the health and prosperity of their patrons:

We insert the following beautiful verses as a specimen of a new set of songs just published by Moore. There are twelve of them says the London Times, “and we think they are among the best efforts of the most graceful and fanciful of English lyric poets.”

If thou would’st have me sing and play,
As once I played and sung,
First take this time worn lute away,
And bring one freshly strung,
Call back the time when Pleasure’s sigh
First breath’d among the strings;
And time himself, in flitting by,
Made music with his wings.
Take, take the worn out lute away,
And bring one newly strung,
If thou would’st have me sing and play,
As once I play’d and sung.
But how is this? though new the lute.
And shining fresh the cords,
Beneath this hand they slumber mute,
Or speak but dreamy words.
In vain I seek the soul that dwelt
Within that once sweet shell,
Which told so warmly what it felt,
And felt what naught could tell,
Oh, ask not then for passion’s lay
From lute so coldly strung,
With this I ne’er can sing and play
As once I played and sung.
No—bring that long loved lute again,
Though chilled by years it be,
If thou wilt call the slumbering strain,
’Twill wake again for thee.
Though time hath froz’n the tuneful stream
Of thoughts that gush’d along,
One look from thee, like summer’s beam,
Will thaw them into song.
Then give, oh give that wakening ray,
And, once more blithe and young,
Thy bard again will sing and play,
As once he played and sung.

CONTENTS OF THIS NUMBER.

Inquiry concerning the Frederick sheep—wheat crops destroyed by the chinch-bug—notice concerning the article on geraniums—comparative view and statement between the product of a first rate Durham short-horn and a common cow—work for December—an account of a new importation of Durham and Ayrshire cattle—scientific description of the geranium—M. Puvion on the use of lime as a manure—recipe for making Isabella wine—a good thing—a new song by Moore—bank note table, prices current and advertisements.

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.	
U. S. Bank,	par
Branch at Baltimore,	do
Other Branches,	do
MARYLAND.	
Banks in Baltimore,	par
Hagerstown,	1a
Frederick,	do
Westminster,	do
Farmers’ Bank of Mary’d, do	do
Do. payable at Easton,	do
Salisbury, 5 per ct. dis.	do
Cumberland,	2a
Millington,	do
DISTRICT.	
Washington,	do
Georgetown,	do
Alexandria,	do
PENNSYLVANIA.	
Philadelphia,	1a
Chambersburg,	2a
Gettysburg,	do
Pittsburg,	1a2
York,	1a
Other Pennsylvania Bks. 1a2	do
Delaware [under \$5],	3a4
Do. [over 5],	2a2
Michigan Banks,	5a
Canadian do,	5a
VIRGINIA.	
Farmers Bank of Virginia 1a2	do
Bank of Virginia,	do
Branch at Fredericksburg do	do
Petersburg,	do
Norfolk,	do
Winchester,	do
Lynchburg,	do
Danville,	do
Bank of the Valley,	do
Branch at Romney,	1a
Do. Charlestown,	do
Do. Leesburg,	do
Wheeling Banks,	1a2
Ohio Banks, generally 2a3	do
New Jersey Banks gen. 1a2	do
New York City,	1a
New York State,	2a3
Massachusetts,	2a2
Connecticut,	2a2
New Hampshire,	2a2
Maine,	2a2
Rhode Island,	2a2
North Carolina,	2a3
South Carolina,	2a3
Georgia,	3a3
New Orleans,	4

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,	bushel.	2 50	
CATTLE, on the hoof,	100lbs.	4 50	5 25
CORN, yellow, old, 90	bushel.	new	60 to 75
White, do 90	do		60 to 75
COTTON, Virginia,	pound.	18 1/4	
North Carolina,	“		
Upland,	“	18 1/4	20
FEATHERS,	pound.	37	40
FLAXSEED,	bushel.	1 25	1 37 1/2
FLOUR & MEAL—Best wh. wh’t fam.	barrel.	8 00	8 50
Do. do. baker’s,	“	7 50	8 00
Do. do. Superfine,	“	6 75	6 87 1/2
SuperHow. st. in good de’d	“	6 87 1/2	
“ wagon price,	“	6 62 1/2	
City Mills, extra,	“	6 87 1/2	
Do.	“	6 75	
Susquehanna, firm & scarce	“	6 12 1/2	6 25
Rye,	“	4 62	4 75
Kiln-dried Meal, in hhd’s.	hhd.	19 50	20 00
do. in bbls.	bbl.	4 25	4 37 1/2
GRASS SEEDS, red Clover,	bushel.	5 00	5 75
Timothy (herds of the north)	“	2 75	3 25
Orchard,	“	2 25	3 00
Tall meadow Oat,	“	2 00	2 50
Herds, or red top,	“	1 00	1 25
HAY, in bulk,	ton.		15 00
HEMP, country, dew rotted,	pound.	6	7
“ water rotted,	“	7	8
HOGS, on the hoof,	100lb.	7 00	7 50
Slaughtered,			
HOPS—first sort,	pound.	12 1/2	
second,	“	10	
refuse,	“	8	
LIME,	bushel.	33	35
MUSTARD SEED, Domestic,	“	5 00	6 00
OATS,	“	42	45
PEAS, red eye,	bushel.		
Black eye,	“		1 25
Lady,	“		
PLASTER PARIS, in the stone,	ton.		3 50
Ground,	barrel.	1 25	
PALMA CHRISTA BEAN,	bushel.	2 00	
RAGS,	pound.	3	4
RYE,	bushel.	80	85
Susquehanna,	“	none	
TOBACCO, crop, common,	100 lbs	5 00	5 50
“ brown and red,	“	5 00	7 00
“ fine red,	“	7 00	9 00
“ wrappery, suitable	“		
“ for segars,	“	5 00	10 00
“ yellow and red,	“	8 00	12 00
“ good yellow,	“	11 00	16 00
“ fine yellow,	“	12 00	16 00
Seconds, as in quality,	“	4 75	5 00
“ ground leaf,	“	5 00	8 00
Virginia,	“	6 00	
Rappahannock,	“		
Kentucky,	“	8 00	14 00
WHEAT, white,	bushel.	1 45	1 55
Red,	“	1 35	1 44
WHISKEY, 1st pf. in bbls.	gallon.	37	37 1/2
“ in hhd’s.	“	33 1/2	
“ wagon price,	“	30	bbls.
WAGON FREIGHTS, to Pittsburgh,	100 lbs	1 50	
To Wheeling,	“	1 75	
WOOL, Prime & Saxon Fleeces,	pound.	55 to 68	30 to 32
Full Merino,	“	48	55 28 30
Three fourths Merino,	“	45	48 26 28
One half do,	“	40	45 24 26
Common & one fourth Meri.	“	36	40 22 24
Pulled,	“	38	40 23 24

2,000 MORUS MULTICAULIS.

FOR SALE by R. Sinclair, Senr., at Clairmont Nursery, 2,000 Morus Multicaulis trees (the Chinese Mulberry.) These trees are between 7 and 8 feet high, and if planted out this fall might be fed from to advantage next spring. Persons desirous of purchasing, would do well to make early application. Their superiority for feeding silk worms is universally admitted.

THE SILK MANUAL.

JUST published and for sale by Sinclair & Moore and Robt. Sinclair, Jr., at the Maryland Agricultural Repository, Light near Pratt street, Baltimore, a complete Manual of the Silk Culture, in which plain instructions are laid down for the culture of the Mulberry, the feeding of the Silk worms, management of the cocoons, reeling, spinning and dyeing of the Silk. In fine, it is a perfect Manual, and comprises every department of the business. The rules are arranged in so plain and methodical a manner that every one can understand them, and by a very few hours attention become master of the business. It is clearly demonstrated in this Manual, that largely upwards of \$500 may be netted from an acre in the Culture; and it is a singular fact connected with the Mulberry as adapted to the making of Silk, that poor dry, sandy, or gravelly land suits it best, the fabric made from worms fed on leaves raised on such soil, being greatly superior in elasticity and richness of gloss to those grown on rich grounds.

Price—per copy, 50 cents.

Liberal discounts made to the trade.

nov 24

MULBERRY TREES AND SEEDS.

100,000 Chinese Mulberry or *Morus Multicaulis* of various sizes at reduced prices.

150,000 White Italian Mulberry at very low rates by the 1000 or larger quantities.

200 lbs. White Italian Mulberry seed.

Also the following superior large sized trees which now form a Mulberry orchard—but must be removed:

2000 Chinese Mulberry 3 years old $7\frac{1}{2}$ to 8 feet high.

2000 do do 2 do $5\frac{1}{2}$ to 6 do

2000 do do 3 do and budded on the

White Mulberry which have proved to be much more hardy than those from cuttings.

These 6000 trees are the greatest acquisition that any silk culturist can possibly obtain, and there is not another equally valuable collection for sale in the Union, as those who have such will not part with them.

50,000 cuttings of the Chinese mulberry at reasonable rates by the 1000, &c.

The New Catalogues of Garden and Flower seeds are just published, comprising the largest assortment ever offered for sale, and including all the choice new varieties. Venders will be supplied in any quantities at very low rates and a liberal credit.

The subscribers will enter into contracts to supply any number of Chinese or White Italian Mulberries on very reasonable terms.

Fruit and Ornamental Trees of all kinds, Garden seeds, Bulbous roots, Green-house plants, and every other article promptly supplied and at very moderate prices.

N. B. Pear trees of large size.—Catalogues will be sent to every applicant.

Wm. PRINCE & SONS.

no 17

4t

TO AGRICULTURISTS—The analysis of Soils, Marls, mineral waters, and other productions, interesting to those engaged in Agricultural pursuits, is performed with promptness and accuracy, by

TYSON & FISHER, Chemists,

no 3 Druggists, No. 192 Market street, Baltimore.

LEON.

THE splendid bull LEON, is now at *Clairmont Nursery*, where he will remain a few weeks. He is a full blooded improved Durham short horn, and allowed to be one of the best bred animals in the country. He will serve Cows at \$5 each. He is milk white, with a hide as glossy and soft as satin. For his pedigree, see the advertisement, in which he is offered for sale in this day's paper.

no 3

STOCK OF IMPROVED SHORT HORN DURHAM.

THE editor of the *Farmer and Gardener*, Baltimore, has for sale two 7-8 and four 3 4 bred cows, 2 full bred and seven 7-8 bred bulls of the improved short-horn breed. They are all fine animals whether regard be had to their milking or fattening propensities. Their pedigrees are indisputable, all tracing to the *British Herd book*. They will be sold low for cash, their excellence being considered.—To any person, company, or society, who may want several, a great bargain would be given.

Letters addressed to the editor upon this subject, must be post paid.

nov 10 4t

AGRICULTURAL AGENCY IN PHILADELPHIA.

IRVINE HITCHCOCK, late proprietor of the American Farmer Establishment, Baltimore, having sold that concern, has removed to Philadelphia and established himself as an Agent for the purchase and sale on commission, of choice Live Stock, Seed Grain, Grass Seed, Fruit and Ornamental Trees, and other productions of the Nursery and Garden, Agricultural Implements and Books, and in fine, of all articles and commodities in the farming and gardening line.

He hopes that his experience in this business, the fidelity and promptness with which he has heretofore executed orders, together with his extensive acquaintance and correspondence with the most eminent stock breeders, farmers, nurserymen and gardeners in the union, will be deemed sufficient guarantees that all business entrusted to him will be both ably and faithfully performed; and that the eligibility of this city as a point, between which and almost every other important place in the Union, transportation, either by land or water, is exceedingly convenient and cheap, will operate as an inducement with those requiring such services to send him their orders.

It is expected that letters when unaccompanied by a remittance or a positive order, will be post paid.

Office at No. 223 Arch street, between 6th & 7th sts.

On sale now, a variety of Cattle of the improved Durham Short Horn breed, several of which are *Herd book* animals.

Also, Cattle of desirable descriptions, of pure blooded Devonshire stock.

Also, a supply of the best NORTHERN MILCH Cows, selected by an experienced Dairyman and breeder, without regard to blood or pedigree, but solely on account of their superiority as DEEP MILKERS.

Also, Bucks and Ewes of the most approved breeds of both long woolled and fine woolled sheep.

Also, several Jacks and Jennies, some of them of very superior size and character as breeders.

I. H. also expects to receive shortly a few bushels of the celebrated SHORT (or shot) WHEAT, and a supply of GAMA GRASS SEED, and of SKINLESS OATS. Also the best of White Mulberry Seed and Silk Worm Eggs. The white Mulberry tree from one to three years old, and the *Morus Multicaulis*, or New Chinese Mulberry, will be supplied at moderate prices in the proper season.

Grass and Clover seeds of the best quality can be furnished at short notice and at moderate prices.

no 15

m3t

1000 DOZ. POTATO ONIONS.—This very excellent and remarkable production was introduced into England a few years since, from Egypt. It is not produced from seed, but by off-sets from the roots, like tulips and hyacinths, (is therefore a certain crop) and from its extraordinary fecundity, and other estimable qualities, has already (where it is known) become one of the most valuable garden products. Like the root, whose name it bears, this useful vegetable multiplies underground, each bulb producing a cluster of onions, no wise inferior to the best of the species. The following is the mode of culture, and we would remark that fall planting is the true method—one reason why many have failed in an abundant crop, has been by planting in the spring instead of fall—they require only the slightest protection in winter. But to the directions as stated by an experienced cultivator.

"By the 1st of August, or as soon as the tops fall and wither, take them out of the ground, and lay them several days in the sun; then put them away in a dry place until October or November; they should then be re-set like tulips. The beds intended for them should be previously well wrought, and the plants set in rows about a foot apart. The small or young ones should be separated from the others, for these grow larger, but produce no offspring the first year. Before the approach of winter, some coarse litter may be spread over them, which should be removed in the spring—and they will vegetate and produce a plentiful crop. They ripen in June, and are universally esteemed for their mild and agreeable flavor."

For sale by R. SINCLAIR, Jr.

At Sinclair & Moore's Ag. Rep'y, on Light-st.

nov 10

Printed by Sands & Neilson, N. E. corner of Charles and Market streets.

A SPLENDID DURHAM BULL.

THE editor of the *Farmer and Gardener* has for sale that beautiful and improved Durham short horn bull, LEON. He was 5 years old on the 8th of August last, and has been well taken care of; his color is pure white, with a hide as glossy as satin; he is perfectly docile, and is a bull of uncommon fine temper, and although but a few days off a travel of between 70 and 80 miles, and has been fed all the season on grass, is in fine condition.

Any person wishing to possess himself of one of the best blooded animals in the country, will do well to apply speedily. The following is his

PEDIGREE.

The improved Durham short horned BULL LEON, bred by Wm. H. Freeman, Esq. of Baltimore. Calved on the 8th of August, 1830; now in the possession of S. Canby, of Woodside, Del.

"Leon" is by Gloucester, dam Flora.

"Gloucester" was imported in July, 1826, by Mr. J. H. Powel, calved Feb. 23th, 1825, (bred by J. Whitaker, esq. one of the most celebrated breeders in England) by Frederick, dam Adela, (bred by Mr. Whitaker; gave with her first calf 24 quarts per day) by Orpheus; g d Alfred, (bred by Mr. Hestler, gave 24 quarts per day) by Alfred, (200 guineas was refused for Alfred) gr g d by Windsor, gr gr g d Old Daisy, bred by Mr. C. Collings, (gave 33 quarts daily) by Favorite, sire of Comet; gr gr gr g d by Punch; gr gr gr gr g d by Hubback.

"Frederick," roan, (bred by Mr. Charge) got by Hulton, dam Orbit, by Comet; (Comet sold for 1000 guineas;) g d Splendor by Comet; gr g d Flecked Twin by Major, gr gr g d Red Simon by Favourite; gr gr gr g d Flecked Simon by Bartle; gr gr gr g d Old Simon, (bred by Mr. Charge,) descended from the Studley White Bull.

"Hulton," (bred by Mr. Charge,) got by Newton, dam Meteor by Comet.

"Newton," (bred by Mr. Charge) got by Comet, dam Fanny by Mr. Charge's Grey Bull.

"Comet," red and white roan, calved in 1804, (bred by Mr. Collings,) got by Favourite, dam Young Phoenix, by Favourite; g d Phoenix by Foljambe, &c. &c. (Comet was sold for 1000 guineas at Mr. Collings' sale, Oct. 11th, 1810.)

"Gloucester's" pedigree can be found more at large in a work called "Hints for American Husbandmen, published by the Pennsylvania Agricultural Society," in 1827—he is also recorded in the English Herd Book.

"Flora," (dam of Leon) was got by Sampson, dam Betty, g d Old Betty; Sampson by son of Ossian, d. by Comet; Ossian by Favourite; Favourite by Bolingbroke; d. Phoenix by Foljambe; g d by Alcock's Bull; gr g d by Smith's Bull; gr gr g d by Jolly's Bull.

"Flora's" pedigree can also be found at large in the 'Memoirs of the Pennsylvania Agricultural Society for 1824,' and is likewise recorded in the English Herd Book.

J. H. Powel, esq. considers "Gloucester" one of the finest Bulls ever imported by him.

no 3

SAXONY RAMS.

The editor of the *Farmer and Gardener* has for sale 2 full blooded Saxony RAMS, and 2 $\frac{3}{4}$ blooded do. These sheep are of a family remarkable for their fine fleece, their wool always commanding the best prices in the market.

ALSO

The bull *Brilliant*, a large sized animal of the Improved Durham Short-horn breed. He is red and white; was got in England, and calved in Frederick county, Md., on the 12th May 1829. His dam was Matchless, got by Favorite, (purchased at the sale of the late R. Colling, a celebrated breeder) son of Favorite, dam by H. Allison's Gray bull, sire Orlando, that died on the passage from Liverpool, out of Rosina, from Wiltshire, that gained the highest prize premium of ten sovereigns at a Cattle show in Manchester, England.

no 3

FOR SALE,

A HEIFER rising a year old, with a pedigree which makes her a 15-16ths bred improved Durham Short horn—she is well grown, and prettily marked.—Enquire of the editor.

no 3

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 32.

BALTIMORE, MD. DECEMBER 8, 1835.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, DEC. 8, 1835.

Our correspondent from North Carolina, must not let his failures in the new articles of husbandry he undertook the past season discourage him. He should recollect the moral of the old adage, that a bad beginning makes a good ending, and while we hope that he may adhere to his new grass and cotton with indomitable courage, we trust he will turn a gracious eye towards the Mulberry. In hands so intelligent and enterprising, it could not fail of entire success.

Before we close we would thank him to favor us with the manner of cultivating the *Sweet Potato*, stating the distance of the hills apart, the time of planting, number of potatoes or cuttings inserted in each hill, the depth of planting, number of times of hoeing, the kind of manure used in the preparation of the soil, the best exposure for a good crop, the product to the acre, and the kind of land best adapted to their prolific growth.

The letter which we publish from *Arkansas* today, is full of interest, and should be read attentively. It is from a gentleman of liberal education, who at an early period of his life emigrated to his present place of abode, therefore, what he says of *emigrant hardships, and privations*, is from *experience*; for from the length of his residence in that territory, he must have been almost among the American pioneers. His remarks relative to the value of agricultural papers to a farmer should be well digested by those who hold *book-farming* in such utter abhorrence. Since we have been connected with this journal, we have never conversed with an intelligent farmer, who has not admitted that he derived great advantage from reading productions connected with his business. And how could it be otherwise? A paper devoted to the pursuits of husbandry, is not the mere transcript of theoretic essays, but the repository or record of the result of the experience and practice of those engaged in the culture of

the earth, in both hemispheres, and it is, therefore, impossible that any man can read such a work without being solidly benefitted.

We return our correspondent our sincere thanks for his very able and beautifully written communication, and hope he will not permit the space which separates us to interrupt the current of his eloquent pen.

HORSE-POWER GRIST MILLS.

We have before us a specimen of *corn meal* ground in one of the horse-power *Grist Mills*, which is becoming so popular with the owners of large landed estates. The lower *bed-stone* instead of the upper one runs, and instead of the stones, which are burrs, performing a circular revolution, they run horizontally. The grain resting on the *bed-stone* is thrown out by the centrifugal force as soon as ground, which leaves the meal *lively* though very fine. The sample before us is truly a most beautiful one; to the eye it looks more like *wheat* than *corn meal*, and yet when submitted to the test of the finger and thumb, its delightful granular touch indicates at once that none of that vital principle, which is the life of all flour, and imparts to bread its most desirable quality, had been lost in the process of grinding. These mills reduce three bushels of corn into meal in an hour, and they are equally effective in producing flour out of any other grain.

To gentlemen who have a large number of hands or stock, one of them would certainly be a most valuable acquisition, enabling them as it would, not only to procure a supply of flour for the former without going off their respective estates, but of feeding the latter also with ground food, a thing of the first importance, both with respect to the health of animals and to the saving of provender. It is the opinion of some of the best judging farmers in Europe and America, that by grinding all grain fed to stock, and cutting and steaming their hay or fodder, at least one-third less will serve them, and that the animals themselves can be thus kept in better condition.

THE SILK BUSINESS.

We are pleased to find by notices in every direction of our country, that this lucrative branch of husbandry is fast finding its way to the favor of agriculturists. In the east every one with a farm,

however small, who has not already made it a part of his system of husbandry, is preparing to do so, and associations also are forming to carry it on by companies on extensive scales.

In the *Ohio State Journal*, published at Columbus, we perceive that several enterprising citizens are about to introduce the culture of silk in that part of the west, having already engaged a plantation and purchased 25,000 mulberry trees with a view of entering upon the business immediately.

In *Virginia*, we have already stated in a former paper, in a postscript of a letter, that 40,000 mulberry trees had been set out in the neighborhood of Fredericksburg this fall; and we now perceive from a very excellent communication in the November number of that able periodical, the *Farmer's Register*, that the author, who signs himself "John Dickinson" is "so much encouraged from his personal observations at the cocoonery of Mr. Whitmarsh, Northampton, Massachusetts, that he is preparing to go in for an orchard of 15 acres, and accommodations for five millions of worms." He "counts upon giving employment of a lucrative character, not only to his own women and young slaves, but to many of the neighboring poor people." Heaven prosper him in his undertaking!

He is "happy to find that he shall not grope his way alone in this enterprise, as Mr. J. B. Gray, of Fredericksburg, who has the means and youthful energy for the laudable undertaking, is going largely into the business." With the writer of John Dickinson, we say, "God speed" Mr. Gray in his good works, and we will promise him this,—that long after he shall have been numbered with those that were, his name will be cherished as a pioneer in the glorious work of redeeming the land of his birth from the desolation that hangs with such threatening over a portion of it.

In *Maryland*. We have heard of preparations for the planting of *five orchards*, three in Baltimore county, one in Frederick, and one on the Eastern shore. There may be, and we sincerely hope there are, more; for sure we are, that no state in this Union is better adapted to the culture, or stands more in need of its redeeming influence. To these gentlemen we offer the sincerest wishes of our heart that they may triumphantly succeed—they deserve to do so, and for their public spirit and patriotism are entitled to the gratitude of every heart that clings to its native soil and its hearths and fanes with the affection of virtuous love.

Pennsylvania.—A company with a capital of \$50,000 has been formed in Philadelphia, called *The Beaver Silk Culture and Manufacturing Company*. The company have purchased land within a few weeks, in the vicinity of the Falls of Beaver, to the value of \$30,000 or \$40,000.

EMIGRATION FROM MARYLAND—LAUD- ABLE INSTANCE OF THE RESTORA- TION OF A WORN OUT FARM—GREAT PRODUCTS OF CORN, &c.

There is nothing more true than that pain is the price which we pay for pleasure, whether it be in the form of mental or physical agony, and we were never more forcibly convinced of the justness of the adage than on one day the week before last. A subscriber of our's who resides in Currituck county, North Carolina, called in at the office upon business, when we inquired of him, after an esteemed correspondent who lives in his vicinity, and he replied, "I have not seen him since I was here last summer, I have been to the west looking out for a farm with a view of removing there."

"Have you made a purchase?"

"No sir, I am returning to North Carolina determined to improve the lands that I have."

This information we are free to confess gave us unalloyed pleasure; for although we esteem the people of the west and south west, and bear, we trust, towards them all proper respect and love, there is something about the members of the old confederacy which clings around the best and warmest affections of our heart—which make us rejoice when they prosper, and fills us with regret when the evidence of their downward course is presented to our view. We therefore, congratulated our friend from North Carolina, upon his patriotic resolution, and we felt what we said; for it appeared to us like the filial piety of a child returning to an aged parent to nurture him in the feebleness of age. "I return to North Carolina to improve the lands that I have." These were words of wisdom most feelingly uttered: they came over us as the breezes of the morning—and they exhilarated our spirits and nerved our hand. We recollected that at Mecklinburgh, the first written declaration of human rights was promulgated—that it was in North Carolina that *liberty* found its birth-place, and we joyed in our inmost soul to see one of her worthy sons returning again to those places, which, in his childhood and in his maturer years, had brought so many fond recollections to his mind. But true it is, that "pain is the price of pleasure;" for we had hardly had time to indulge in a train of pleasurable thoughts, before a highly valued subscriber from *Charles county*, Md. came in, and in the course of an hour's chat, informed us of events in his own county, which upset our pleasant reveries. The mischief was at our own door—it was severing the ties of an age, breaking up the associations of families, of friends and relatives.

"Since the first of September last, there have removed to the west and south west, from Charles county, many of our best citizens—whole neighborhoods, as it were, have been broken up—they have gone *en masse*, carrying with them negroes and other property to the value of from \$600,000 to \$1,000,000, I think I might say in safety \$800,000—and the emigration from St. Mary's county has been nearly as great."

This, indeed, was a damper upon all our fond visions. The return to *North Carolina*, was but that of a single individual—it was but a solitary *clear speck* in the horizon—all else were clouds of threatening—the sad portents of evil.

"Why do your neighbors and friends leave the lands of their infancy?"

"They have worn out their lands."

"But then that is hardly a justifiable reason, for those lands are naturally kind, and good culture and manuring would soon restore them.—You have *marl-beds* near you, have you not?"

"Yes; but some are not *willing*, and others not *able*, to lay out money for manures. We have *marl* on the Potomac, but the wagonage would make it become very costly to many land-owners, whose property is located remotely from landings."

"Lime or marl would bear transportation fifteen miles, besides the water carriage. But admitting that to be out of the question—with plaster and clover, the barn-yard and other manure, and rotation of crops, they could bring up their most exhausted lands to a state of fertility, which would yield from 20 to 30 bushels of wheat to the acre, and when once resuscitated it could easily be kept so."

"I am aware of that; my own farm is a striking evidence of the truth of the opinion you have just advanced."

"When I bought it about 20 years ago, it was literally *waste lands*, having been abandoned by its former proprietor, before I bought it, as old fields—whereon nothing but the briar and sedge vegetated. Before it had been thus abandoned, its fertility had been so reduced that the crop of tobacco was not more than four or five hogsheads, and the corn crop so inconsiderable as to barely supply the wants of his negroes. I had not means to manure extensively; but I was careful in husbanding every thing which could be converted into food for plants; I sowed clover seed, used plaster in the proportion of 1½ bushel to the acre, ploughed in the second math of clover, the second year, either in the month of August or early in September, say the first week; left it to decompose; pursued the rotation of crops system, and by these means, together with what manure

I made on the farm, and about 150 loads, which annually purchased from a neighboring town, in six years, I brought up the fertility of my land so as to reap 1811 bushels of wheat from 96 bushels sown. This was from a field that at the time I came into possession of the farm would not have brought more than from 4 to 6 bushels to the acre. From some lots that would not have brought 4 bushels I have since reaped 30 bushels to the acre."

"Well, sir, what you have done, every other farmer in your county might have done—there is no ground, and we care not what is its impoverished condition, which may not by a similar process be made as fertile as yours."

"I am of your opinion. I have a nephew who has, in the same way, brought, in a very few years, waste lands to yield 1,000 lbs. of tobacco to the acre. My own crop of tobacco is still better than that, I have 36,000 lbs. or 40 hhd. from about 23 acres, and I have made about 450 barrels of corn besides raising more clover than I wanted to cut for hay."

We have thus endeavored to embody the conversation as it occurred between us and the gentleman to whom we allude, and we believe that it is substantially correct. At all events it is our desire that it should be so. But here our recollection recalls to mind one part of the process of accumulating manure, which escaped us in the regular order in which it occurred. He informed us that his corn-stalks were all regularly carted into his barn yard. His manner of disposing of them there, was as follows. The chaff from his grain was first placed over the yard, the stalks being thrown upon it, prevented its being blown off by wind. The cattle browsed upon the stalks while there was any thing on them to eat, and afterwards they served to keep the cattle dry, and they, by treading on them, broke them up tolerably well. The chaff being placed underneath the stalks served as a recipient or absorbent for the *urine*, and thus prevented in a great measure, the loss, or escape, of the valuable saline principles which it contained. In the spring all the corn stalks that have not been broken into small pieces by the treading of the cattle, he has chopped up with hoes, into pieces of a few inches length, then carted out into his fields and ploughed in *immediately* before any of their more volatile principles can escape.

He also carefully collects all the leaves that he well can from his woods with which he liberally litters his cattle, horses and sheep, and thus greatly adds to the quantity and quality of his manure. This together with his other manure is also hauled out and ploughed in.

Here then, is an evidence of what may be done by careful cultivation in a very few years. It is the work of a practical farmer, and not the fiction of some enthusiastic theorist. We say it is the work of a practical farmer, of a respected and respectable gentleman, who, in addition to being a *practical farmer*, has been, as he informed us, a *working* one all his life, and although now 64 years old, still superintends every operation of his farm, thus acting upon the principle that an agriculturist should leave nothing to be done by an agent which he can do himself.

We did not ask him what quantity of corn he had raised from an acre of his best land; but we

hold it as an incontrovertible truth, that if proper means be used in the way of manuring in the hill, or list, and no ground be wasted by making the rows too wide and planting the corn too far apart, that an average crop of a hundred bushels to the acre may be obtained. The rows at 4 feet asunder, the hills 3 feet apart with 4 stalks in a hill, will give at a quart a hill, and that is a moderate yield, rather better than a hundred bushels—at 3 feet each way, the same number of stalks in the hill would yield 150 bushels to the acre. Earl Stimpson's corn, as we have shewn in another place, is but 2 feet 8 inches each way, and his success proves that the distances we have named are perfectly practicable.

When we speak of manuring, we mean that after the fields have been manured broad cast, that from a pint to a quart of unleached or even leached ashes should be put into each hill.

Having shewn by the instance of the laudable example of our friend from Charles county, how easy a matter it is for those who will it, to restore to their lands their wonted fertility, we would ask where in the name of patriotism, is the necessity for any man to leave the soil that gave him birth to go in quest of strange lands? There is no ground in the west or south west, that will yield better profits than those at home may be made to yield by five or six years judicious and improving cropping. Of the rich upland prairies of *Arkansas*, what says our intelligent correspondent in another part of this day's paper?

Why that "five acres of upland prairie planted in hills at $4\frac{1}{2}$ feet distance, (the usual mode of planting with us) yielded 250 bushels. The wheat crops throughout the country average from 15 to 20 bushels to the acre." We ask the reader's attention to this subject. We ask him to impress these products deeply on his mind. *Fifty bushels of corn*,* and from 15 to 20 bushels of wheat to the acre, the product of those fertile prairies of the far west, whereof so much has been sung and said. How preferable would it be for those who are still longing after the "land that flows with milk and honey," that are residing in the Atlantic portion of the middle and southern states, to follow the patriotic example of our friend from Charles, than to leave the bones of their forefathers to go in search of *good lands*, which by the same course of *bad culture*, will, in a few years, become just as *bad* as those they are fleeing from. It may possibly be said that the yield from cotton in the south western range of states and territories, is much greater than any *present product* which they can expect at home. True, it is greater; but then, if all the wheat and tobacco growers are to go forth to those cotton regions and become *cotton growers*, there is no axiom in political economy more true, than that the *price* must be reduced in proportion to the excess of supply over and above the absolute wants of the consumers. Markets, we all know, are thus regulated. In Maryland for instance, this fact is often illustrated in the crop of tobacco, a *scanty* crop invariably bringing as much as an *over luxuriant* one.

In the middle and Atlantic southern states, the grower of wheat, rye, corn, tobacco, and, indeed,

The product of the rich alluvial bottoms spoken of by our correspondent is not equal to most of the yields appended to this article.

say upon this head? Why these are his words, and they should sink deep into the minds of every man who may contemplate removing westward:

"Thus I have given you some account of the productiveness of our soil, and such a one as will no doubt, cause a feverish thirst for emigration in some of your readers, whose prospects are discouraging at home. To such I would suggest a few ideas that may be of service if attended to.—*The luxuries and conveniences of life are only beginning to be introduced here. The markets for our staple product is 1,000 miles off, only accessible once a year and that through a difficult and dangerous route.* Those of us who have been here long, and have at length arrived at a comfortable condition, have done so *at an immense expense of labor, suffering and privation, and value our acquisitions agreeable to the cost.*"

Here is a faithful picture drawn by an able pen and impartial writer—it is the picture furnished by a resident of the west—of a gentleman who has resided nearly twenty years in the country of which he is speaking—of one who has realized a competency and intends to remain there. And with this picture, we will close our remarks, by appending the article which follows, from which it will be seen that we are not extravagant in our ideas of the capacity of an acre of ground in corn, when aided by proper culture.

QUANTITY OF INDIAN CORN TO THE ACRE.

The following account of large produce of corn to the acre we take from the *American Farmer* of Oct. 11, 1833, where it was republished from the *New York Farmer*. It will shew our agricultural readers how much corn can be made from an acre of ground by proper manuring and proper cultivation. Our climate is certainly not less favorable to the growth of corn than that of New-York and New England.

Meadowbanks, Deerfield, Mass. Sept. 9, 1833.

Mr. Fleet: Your N. Y. Farmer for this month was received last evening, and I make no delay in replying to the inquiry of your correspondent E. The farmer to whom I referred, whose crops of corn for the last ten years, have averaged more than one hundred bushels to the acre, is Earl Stimpson, Esq. of Galway, Saratoga county, N. Y. On a visit to his extraordinary and admirable establishment, in July of the last year, where every agricultural operation seems to be conducted in the most skilful and systematic manner, he gave me this assurance, as I find noted in my journal at the time; and I beg leave to inform your correspondent, that to any gentleman of agricultural taste and science, a visit to this farm cannot fail to yield instruction and great pleasure.

Mr. Stimpson's success, however, in the cultivation of this valuable crop, is not singular. Examples of crops as abundant are on record in your correspondent's own State; and to these, and to others, as extraordinary, it may be useful and gratifying to refer. I ask leave, therefore, to mention a few, which have been submitted to the most careful examination, and the results established by the fullest proof.

John Stevens, of Hoboken, N. J. produced on one acre, 118 bushels, 2 quarts. "Mr. S. was every thing else which he may raise, has a market at his door; and here again we will quote from our Arkansas correspondent. What does he

confident that he would have had considerably more corn, had not his crop suffered very greatly by a thunder storm, which laid the greater part of it down at the time the ears were setting." On this crop a bet of fifty guineas was pending. The motives to exact measurement were such, therefore, as to secure accuracy. This was some years since; the particular date I am not able to ascertain.

Dr. Steele of Saratoga, in giving an attested account of the crops of Earl Stimpson, in 1821, says that he had eight acres of Indian corn, which yielded 112 bushels to the acre, 896 bushels; 10 do do 90 bushels to the acre, 900 bushels. (*Memoirs of New York Agricultural Society*, vol. 2, page 73.)

The following individuals applied to the Agricultural Society in Washington county, Penn. in October, 1823, for premiums, with authenticated evidence of the quantity raised per acre, on not less than five acres: Joseph Evans 136 bushels per acre—John Wolf, 127 $\frac{1}{2}$ do do—Samuel Anderson, 123 bushels 12 quarts do. Isaac Van Vookens, 120 do do. Isaac Buckingham, 113 bushels 1 quart do do. James Clakely, 133 do do. Jesse Cooper, 108 do do. De Gross Jennings, 120 do do.

In the same year the following individuals applied to the Alleghany County Agricultural Society, for premiums on the crops: James Anderson, of Ross township, 103 bushels, 17 quarts, on one acre—John Snyder, of do. 103 per acre, on five acres—John Irwin of do. 105 bushels, 20 quarts per acre, on 4 3-4 acres—Wm. McClure, 129 bushels per acre, on 5 acres. (*Memoirs of Pennsylvania Agricultural Society*, vol. 6, page 228.)

In 1822, J. & M. Pratt, of Easton, Madison co. N. Y. obtained from one acre, 172 $\frac{1}{4}$ bushels—do. 161 do.—do. do. 161 do.

In 1825, the same gentlemen obtained from four acres, 680 bushels, or 170 to the acre.

From public and private testimony I know that the respectability of these gentlemen is such as to justify entire confidence in their statements; and their crops were subjected to the particular examination of committees for a premium. The Messrs. Pratt say they have no doubt of being able to obtain 200 bushels to an acre.

In 1823, Benj. Bartlett, of Easton, Madison co. N. Y. obtained from one acre, 174 bushels. The veracity of this gentleman is equally unquestioned; and his, too, was a premium crop.

In 1831, Benjamin Butler, of Oxford, Chenango co. N. Y. states that he raised on one acre, 130 bushels, at 60 lbs. per bushel, or 140 bushels at 56 lbs. per bushel. (*New England Farmer*, for Nov. 1831.)

We will come now to some crops which have been produced in Massachusetts, on our cold, and rocky, and despoiled soil. The evidence of these crops is ample, and of undoubted character.

In 1820, J. Hunnewell, of Newton, produced 111 $\frac{1}{4}$ bushels to an acre.

In 1822, J. Valentine, of Hopkinton, produced 116 bushels, 28 quarts, to an acre—D. Burham, of Newbury, 117 bushels 8 quarts, do.—T. & H. Little, of do. 116 do. P. Williams, Fitchburg, 116 bushels 12 quarts, do.—W. Hull, of Newton, at the rate of 118 bushels, on seven-eighths of an acre.

In 1823, Fitch Winchester, of Southboro', 103 bushels per acre—John Lees of Newbury, 113

bushels, 16 quarts, do. T. & H. Little of do. 115 bushels do.—Thaddeus Howard, of West Bridge-water, 122 bushels 23 quarts do.

In 1824, Wilmarth of Taunton, 142 bushels per acre.

1825, S. Longly, of Shirley, 112 bushels, 21 quarts, per acre.

1827, John Andrew, of Danvers, 110 bushels per acre.

1831, Charles Bugbee, of Palmer, in Hampshire county, states that he has produced on five acres, 540 bushels, or 180 bushels to the acre.

A GOOD YIELD OF CORN NEAR HOME.

We went to *Clairmont*, the residence of Mr. *Robert Sinclair*, Sen., a few days since to see the product of half an acre of the corn, of which we spoke in our 20th number measured. But as Mr. S. was not at home, we were denied that gratification: we, however, saw the ears laid aside in the barn, and have subsequently received from that gentleman a faithful report of the result of the measuring, which he superintended himself.

Besides a barrel of nubbins which was not taken into the account, there were 42 bushels, 3 pecks of good long ears, and by the bye, they were among the largest ears we have ever seen. The corn is of the kind called here the *yellow gourd seed*. This yield is equal to $85\frac{1}{2}$ bushels to the acre, but does not come up to our standard of an *average* crop on good land. We believe and have so stated, that good ground, properly cultivated, should be made to yield 100 bushels to the acre.

Heretofore, in noticing the ground on which this corn was grown, we stated that it was "a bottom of black and deep loam, much of it alluvial deposits from the overflowing of the Herring Run,"—that it was "naturally rich, and the corn in consequence not manured." In the main we were right. The field, as a *field*, was not manured: but the corner of it whence this lot was taken, being poor, was, however manured, by a shovelful of cow-yard manure being thrown into each hill—it was planted 4 feet apart either way, and received no extra cultivation.

The reasonableness of the position we have assumed will be at once acknowledged, when we state, that 85 bushels of corn to the acre, is just 1 quart to the hill at 4 feet distance apart either way: now suppose we plant the corn 3 feet apart in the rows and the latter four feet asunder. This at the same rate of yield would give us 113 7-8 bushels to the acre. No one, we think, will pretend to deny that land will bear this dense cultivation, when it is well established, that Earl Stimpson of New York plants his corn in hills but 2 feet 8 inches apart, each way, and his crops of corn, which amount to 5,000 bushels a

year, have averaged above 100 bushels to the acre for ten years in succession, and that Mr. Renick, near Circleville, gathered 157 bushels 1 peck from an acre planted 3 feet apart either way. The example of the utility of close culture, as afforded by the successive fruitful yields of Mr. Stimpson's farm, should beat down a thousand assertions based upon *mere opinion*, as most of them are. An opinion—traditional in its origin have been handed down from the father to the son, and from generation to generation, until it has been received as an agricultural axiom, to which no one must dissent—that the close planting of corn "fires" the crop. Than this, nothing is more inconsistent with nature. What is it we would ask that causes the firing? Why the effect of the heat of the sun, during a long continued drought, upon the earth, which by exhausting the soil of all its moisture cuts off the source of nourishment from the roots, and the consequence is, that, as they can derive no nutrition from the earth, the stalks and leaves become arid, parched and dry—in a word, become *fired*. Now if those stalks had been closer, if the sun's rays had been shut out, or partially so, the exhalations from the earth would have been greatly diminished and consequently the moisture of the earth would have been retained to nourish the plant and forward its vegetation. Why is it that if we wish to enjoy a cool room in summer, we close our outward shutters? Simply because by so doing we prevent the sun's rays from penetrating it, and thus get rid of the *caloric* with which they are charged, or *that*, according to the newly broached theory, which is produced by electricity in coming in contact with some other body. According to Mr. Stimpson's *theory* corn cannot be manured too much; and the result of his *practice* demonstrates its propriety; but according to those consistent planters, who have followed in the good old track of their grand-sires—corn will grow by *nature without* manure, or what is equivalent to it. A year's rest is the *panacea* with them. And this has been pursued until lands naturally kind and fruitful, has ceased to pay tribute to their improvident task-masters—not because they have rebelled against them, but because they have been spoiled of their powers of fruition. It is, indeed, pleasant to behold men like *Earl Stimpson*, and Mr. *Renick* consulting nature and reason, and profiting by the *bad* examples of those who have gone before them. There is nothing in their soils which render them superior to thousands and tens of thousands of the corn lands in this state, Virginia, North Carolina, and other corn growing states; but then they go upon the principle that if they do not feed their lands, they will not feed them: here is the mystery of their cultivation: and then, as they are liberal to their soil, they choose that it shall perform all that it is competent of doing. They plant respectively, as we said before, in hills 2 feet 8 inches apart, and 3 feet apart each way, and they leave 4 stalks in a hill. They know that by manuring freely, their lands will bear it; that if they do not *plant* corn, nature will grow *crab grass*, and therefore, they prefer to occupy all the ground that can be advantageously occupied, with stalks of corn; preferring them to the useless pests which usually take possession of corn fields. The ground will not if men will be idle: if the husbandman does not

call its capabilities into full action, the earth will do so itself. How often do we in a grain or grass field see more weeds than the plant which was sown. This would not have been the case had the proprietor been less sparing of his seed, and done justice to himself and his soil, by putting it into a proper condition for culture.

GAMA GRASS AND COTTON.

Extract of a letter from a correspondent of the editor of the Farmer and Gardener in Currituck Co., N. C.

"I think you inquired for Gama Grass seed—there is none here; for we are not much in the spirit for such innovation as the introduction of grasses, and the gama grass would be something new. I had the *good luck* to obtain from a friend last winter near a quart of the seed, and the *misfortune* to have them planted so that I did not save more than 50 or 60 plants. I was away and the men left the ground so smooth that I could not tell where to look for them, and the consequence was, the native grass and weeds came long before the gama did and over ran it.

I have since found the gama grass growing close to me, on the marshy banks of the North-West river, and have saved near a pint of seed ready for another trial. Has it been found as far north before, (except by tourists?) say one mile south of the Virginia and North Carolina line.

On the subject of *Cotton*, I must be allowed to be a little demure, my experiment proving an entire failure; but although the crop with us is a very precarious one, I am nevertheless convinced that the method I pursued in cultivating mine, was, and would be a very considerable saving of labor, and without claiming any thing of originality, I must tell you the manner in which I managed it.

The ground having been bedded at the proper width, I harrowed once lengthwise, with a view to get an even surface in order that I might make the bottom of my seed furrow level: I opened a very narrow furrow and dropped the seed—then, with a good sized plough, raised a list over the seed by running once on each side; thus the seed remained until on examination I found many of them had germinated, when I rubbed down the face with a block such as I use to cover cotton or corn with; regulating it so as just occasionally to expose a few seeds. In from 30 or 36 hours from this time, the seed leaf was completely developed and exhibited a beautiful line of green on a bed perfectly clean and level, and as well pulverized as it could possibly have been done by hand. Here you see, I had a start of the grass, and before that come in the way much, the cotton was ready for the first operation, in the way of killing the weeds, &c.

Now comes the practice of the last suggestion I had heard, (and whether of the two it would kill the grass or the cotton, *there was the rub*;) for it was nothing more nor less than to pass the harrow across the beds from side to side. At it I went, however, and while the harrow in its progress laid low every weed that was at all in the way, there was enough of the cotton above the soil to convince me the havoc was not complete, and soon it stood erect enough and more than enough for a stand. *One hoeing* completed the cultivation, and *one frost* consummated its destruction.

CROPS IN THE WEST—HARDSHIPS OF THE EMIGRANTS, &c.

Extract from a letter from a correspondent of the Farmer and Gardener, in the territory of Arkansas.

HEMPSTEAD CO. ARK. TER. NOV. 7, 1835.

Editor of the Farmer & Gardener :

SIR.—Inclosed you will receive payment for the 2d vol. of your valuable paper. I conceive myself amply repaid the worth of my money, by one solitary essay from one of your correspondents, on the culture of the Irish potato. The want of success that has hitherto attended the culture of this important vegetable in this country, has been attributed to the long continuance of the warm season, and the unsuitableness of the soil. At any rate, the labour bestowed upon it had been but poorly rewarded. The essay alluded to, recommends planting the seed in the fall, and on the top of manure. The hint caught my fancy, and induced me to make the trial. My garden is on a gentle slope of a pine ridge, with a northwestern exposure. The soil is a clay loam, and had been formerly cowpenned. On one side I had planted grape vines at eight feet distance, and the interspaces planted in small garden stuff, that had been matured and gathered off, leaving the ground to cover itself with weeds, and grass. With my hoe I dug a hole midway between the grape vines, a foot deep, and a foot and a half wide, through the surface mould into the red clay, and filled it with the green vegetation from the surrounding surface. The seed, a single tuber, whole, was then placed on the top, and covered first with the black surface mould, and banked over with red clay, deep enough to exclude the frost. This was done the last week in November. I had about a peck of seed, of the variety called early white, and of such a size as to average twenty to the quart. In the spring but very few of the hills were missing.—No more labour was bestowed on them than cleaning away the weeds and pinching out the blossoms. On the 15th of May some of the hills were examined, and tubers of the size of hen's eggs were found. From this time the largest were regularly grabbed out for use as they were wanted, without any injury to the small ones that were left. About the middle of July the crop was matured, and the vines dead. Ten bushels were dug at that time and spread on a floor in a loft to dry; many of the potatoes exceeded a pound in weight, and the hills that were preserved, to estimate the crop by, averaged 6 quarts to the hill. Some that were left in the ground at digging have grown the second time, and have now young tubers that weigh an ounce. I am nursing them for a second crop.

I am also indebted to another of your correspondents respecting Indian corn—that strong land will bear the stalks to stand thicker than is the usual custom. As our alluvial bottoms are composed to a great extent of decayed vegetation, mixed with the marly wash from the prairie hills, and been accumulating for ages, we cannot conceive of any soil superior in richness. I determined on planting ten acres of bottom in a drill, and to leave the stalks but twelve inches distance. The ground was listed deep at 4 feet distance between the corn rows of last year, the seed dropped in the furrow, and covered with a heavy fur-

row from a plow on both sides. About a week afterwards, the ridge was raked with a light harrow, and in another week, (two weeks from planting) the young corn appeared, with all the evenness and beauty of plants in a garden bed. The first working of this corn, consisted of a furrow on each side of the row, turning the soil from the corn, cleaning with the hoe, and breaking the middles. The second working, which was the last, consisted of turning the furrows each way to the row, and pulling off the suckers. This ten acres yielded 1100 bushels; the stalks, as thick as they stood, many times within six inches, were all heavy and fruitful. Eighty ears, to average the whole crop, make a bushel of shelled corn. Picked ears greatly exceed this. I have one lying by me whilst writing, that measures 12 inches in length by 10 in circumference, 20 rows and 60 kernels in a row, filled out over the end—it has filled the quart pot with shelled corn. Five acres of upland prairie, planted in hills at $4\frac{1}{2}$ feet distance, (the usual mode of planting with us,) yielded 250 bushels; this was ploughed once each way, and hoed but once.

The wheat crops throughout the country, though on a small scale, (cotton being the all-absorbing object,) average from 15 to 20 bushels to the acre. From the middle of July to the 1st of September, we had a continued succession of rains and cloudy weather, and the soil saturated with water. The crops of corn were made unusually heavy from this cause; the crops of cotton were thought to be suffering from the excessive wet, but since the return of dry weather, which continues yet warm, this staple appears yet uninjured. One of our heaviest cotton planters told me the other day, that his whole plantation might be safely estimated at a bale (400 wt. nett) to the acre.

But I must tell you of my grape-vines and mulberries. I have one vine, a graft of last year, that has produced half a bushel of grapes. I have another, a graft of last spring, that has produced the first season, eleven large elegant clusters of grapes—another, a cutting without root, one handsome cluster; the fruit is large, oval, and a dark purple. I have fifty vines, planted from cuttings in November last, that are now from 20 to 30 feet in length. I know not the name of the variety, but it came originally from Prince's. My cuttings of white mulberry, obtained by trimming one of last year, are now eight feet high, and from five to ten sprouts from each cutting—these I design separating and planting out for standard trees, in which I have no doubt of success.

Thus I have given you some account of the productiveness of our soil, and such a one as will cause a feverish thirst for emigration in some of your readers, whose prospects are discouraging at home. To such, I would suggest a few ideas that may be of service if attended to. The luxuries and conveniences of life, are only beginning to be introduced here; the market for our staple produce is 1000 miles off, only accessible once a year, and that through a difficult and dangerous route—those of us who have been here long, and have at length arrived at a comfortable condition, have done so at an immense expense of labour, suffering and privation, and value our acquisitions agreeable to the cost. None but working men are likely to succeed here, and they must expect to give value, in labour or money, for all they obtain.

Let none come here thinking to live by their wits, presuming on a want of intelligence among the people. The race of pioneers are the most sagacious people in the world; though untaught in artificial life, they are endowed with an intuitive perception of what is really useful or valuable—Hospitable and courteous to strangers, they encourage and reward merit, but that merit must be real, and manifest itself by patient industry in some useful employment. But the pioneers at present form but a small proportion of our population. During the three last years, wealth and intelligence have been pouring upon us with a strong and steady tide, and chiefly from the slaveholding states. They are of that class of men that are willing to expend their labour and means, to encounter obstacles and endure privations, in the sure hope of ultimate reward. It is labour that is wanted here, robust, hardy, persevering labour, to subdue the forests, erect habitations, and supply implements for cultivating the soil.

We know how to sympathise with your feelings, to which you gave vent in your "APPEAL." The sentiments you there express do honor to the heart of the patriot. Who that is strongly endowed with the *amor patriae* can look with patience at the hordes of discontented emigrants, abandoning the homes of their fathers, to seek a home in the wilderness beyond the mountains? I confess, that for myself, when in early youth, I joyously sported with the dear companions of my childhood, among the bleak barren rocks of the north—when we visited in the church-yard the tombs of our ancestors, from the pilgrims of the Rock, down to the grand-sire that dandled us on his knee—when from the tall rock we gazed with rapture on the glorious sun rising from the bosom of the expanded ocean that broke his waves beneath our feet, or surveyed the venerated spire that pointed to heaven as the only home worth seeking—when congregated in the groves of Academus, we formed those associations which we vainly thought would last for ever—little did I think, that at the dawn of manhood I should take a final leave of those idolized objects, that I should leave parents, brothers, friends, and all that life held dear, to locate myself in the far, far west—that I should penetrate the howling wilderness, and scoop out of the bosom of the forest a home for a future family circle of my own, to whom the place of their nativity would be as dear as mine had been to me—but so it was. I found myself at manhood qualified for usefulness—willing to labor for a support—but I had no land, and was dependent alone on the blessings of Providence or my honest exertions. And felt an honorable pride, that no doubt glows in the bosoms of thousands, that have crossed the mountains, that revolted at the idea of accepting patronage without the certain prospect of returning an equivalent, or to remain a hireling on such terms as afforded no hope of even doing better. Exciting descriptions of the valley of the Mississippi frequently sounded in my ears, or met my eyes, and with the elastic buoyancy of youthful hope, I bent my steps westward. "I came, I saw, I conquered." Seventeen bright summers have passed since I first planted my little log cabin on a spot of public land, that has since become my own, and though what the rich call wealth, has not fallen into my lap, yet competence has

rewarded my labors, and though but few luxuries and little refinement come to our share, we enjoy a rustic abundance. A circle of robust sons and daughters, natives of Arkansas, surround the family altar, and join their voices with mine in raising the hymn of my childhood to Him who smiles on the wilderness as well as the town. And though fond recollection dwells on the hallowed fane whose walls reverberate with the loud anthem, we here enjoy the consciousness that the offerings of the grateful heart are accepted from beneath the shelter of the humble log meeting house.

Yours respectfully, N. D. SMITH.

CURING MEAT.

The following receipts for curing meat we copy from the *Genesee Farmer*. We approve of them all except the one for curing *Hams*, and to that we would add 6lbs of brown sugar to every bushel of salt, and in addition we would rub all the parts of a ham where skippers usually make their attacks with a small proportion of Cayenne pepper. And in hanging the meat up, we would always hang the large part upwards. The proportion of salt is for a thousand weight of pork.

Salting Pork.—The common and simplest method is to imbed the pieces completely in salt, for which purpose a layer of salt should be first placed upon the bottom of the barrel, then a layer of pork placed in the usual manner, and the interstices well filled with salt. It is always best to apply plenty of salt, as whatever is not absorbed by the meat is in good condition for applying next year. Saltpetre, unless employed in very small quantities, is injurious to the quality of pork. A small proportion however, (some recommend only a four hundredth part,) prevents the meat from absorbing so great a quantity of salt, at the same time that it is preserved equally well. Many add a small quantity of sugar to improve its flavor.

Curing Hams.—Mix one bushel of first rate salt with one pound of saltpetre, rub the pieces well with the mixture, and put them down. In a few days take them up and rub them again, which makes them take the salt even. In about four weeks, remove them and wash them, when they will be ready to be hung in the smoke house. Shoulders and smaller pieces should be taken up and washed sooner, according as they are less in size. The meat should be hung in the smoke house so that it cannot possibly fall, for if a piece should fall in the fire, it would most probably burn the house, or injure or destroy the rest.

The following has been recommended as a most excellent mode of preserving hams: Take one pound of salt, one ounce of saltpetre, pulverize them well and mix them, add about two quarts of molasses, rub the hams thoroughly with this mixture, lay them flesh side up and let them remain eighteen or twenty days.

Preserving Beef.—The following method is recommended in Deane's *New-England Farmer*: "For a barrel of beef of the common size, reduce to powder in a common mortar four quarts of common salt; then eight ounces of saltpetre,

and five pounds of brown sugar. Let the salt be well rubbed into the pieces, pack them close in the barrel, and sprinkle the saltpetre and sugar evenly over each layer. No water at all is to be applied. The juices of the meat, if well packed, will form a sufficient quantity of brine; and the beef will keep sweet and good through the following summer, supposing it killed and packed in the beginning of winter, or late in autumn; and will not be too salt to be palatable. Draining off the brine and purifying it by boiling and scumming, with the addition of a little salt in the beginning of summer, and returning the brine upon the meat, will be a real improvement.

Another method for pickling beef, is recommended in the same work, in substance as follows: For every 100 lbs. of beef, take 16 lbs. fine salt, 2 lbs. brown sugar, 4 1-2 gallons of water, and 6 oz. of saltpetre. The salt, sugar and water are to be put into a brass or copper kettle over a fire. Continue to stir the salt frequently until it is all dissolved, and the scum ceases to rise, which should be skimmed off as it appears. After this add the saltpetre. Let the pickle stand till it is about cold, or blood warm. Have the beef cut in smallish pieces and packed closely, free from any bloody pieces. Add the pickle, and cover it tight from the air. Should there be any appearance of mould on the surface of the pickle, at any time, add a handful or two of fresh salt.

GATHERING AND PRESERVING RUTA BAGA.

The season for harvesting should be postponed as long as there is any probability that the weather will permit, or before hard frosts set in. Judge Buel thus describes this mode of gathering: "The roots are pulled up and laid on the ground, the tops of two rows turned towards each other. The pullers are followed by a man or boy with a bill hook, who with a light blow, cuts the tops as fast as three or four can pull. Three men will in this way harvest of a good crop, 300 bushels a day." If any difficulty is experienced in pulling them in consequence of the hardness of the soil, the earth may be turned off from the roots by a plough, and then gathered by hand. A writer in the *N. E. Farmer* gives the following as his method of preserving them through winter. "I had a cellar made under my barn 7 feet deep, 26 feet wide, and 32 feet long; this, if I am right in my figures, will hold 4000 bushels. To dig and stone this cost me \$46, digging and drawing the stone \$20 more, and \$4 for pointing, making in all \$70, the interest of which is \$4.20. Now I know no other way that 4000 bushels of turnips can be secured for \$4.20, their bulk being 19 or 20 cords. There is another very important consideration, when they are in the cellar they are perfectly secure and can be had every day through the winter when they are most wanted, which is not the case when they are covered on the field." But when it is not practicable to put them in a cellar, they may be placed in a ridge or long heap two or three feet high and of an indefinite length, covered with straw and earth, if the heap is made larger, the roots are liable to become injured by heating. In order also to allow the escape of the heated air produced from the heap, it will be ne-

cessary to make a hole at the distance of every few feet and partially close it with a wisp of straw.

Raising and Preserving Seed.

The *Ruta Baga* is apt to degenerate, if the seed is not saved with care. The best roots, in form and size, should therefore be selected, and carefully preserved over winter, and set early in the spring in a rich soil, remote from any roots of the turnip or cabbage kind, to preserve the seed pure and unmixed. The seed should remain until fully ripe and then be gathered.—*Genesee Farmer*.

GATHERING AND PRESERVING MANGEL WURTZEL.

Roots of mangel wurtzel are equally tender with the potato, and equally affected by the frost, consequently, as they are much exposed above the surface of the earth, they will require attention without delay, or the crop may be lost. As a general rule they require nearly the same treatment in preserving for the winter, as the potato; they should however be kept as cool as is consistent with their safety, and they will be in fine condition in the spring. In gathering, care should be taken to cut off the leaves about half an inch above the crown, as they will not keep so well when cut more closely. A writer in the *English Farmer's Journal*, adopted with success, the following mode of preserving this root. "I packed it in long heaps, about seven feet wide at the bottom. I begin by forming the outside with the roots, not stripped of their tops; tops outward; the internal parts to be filled with roots without leaves; continue one layer over another, until the heap is about six feet high, and about two feet broad at the top, which may be covered with straw and earth; the ends of the heap should be covered in the same way; the leaves form an efficient covering against rain and frost." This method will answer well where it is intended to feed out the roots late in autumn and early in winter, but it is not by any means sufficient to preserve them from the winters of this country until spring. They should therefore in such a case, have additional covering. T. & H. Little of Newbury, Mass. who have distinguished themselves by their successful cultivation of this root, say, "As to the best mode of preserving them, we have tried divers ways—by pitting them, by putting them into a barn and covering them with hay, and putting them into a cellar; the last mode we think the best."—*Genesee Farmer*.

[From the Cultivator.]

SKINLESS OATS.

Increase twenty-eight fold.

J. BUEL, Esq. Sir—In communicating the produce and cultivation of skinless oats raised by E. Holbrook, Esq., I beg you will not think me arrogant, or having any pretension to great agricultural skill—our motive simply is, that we hope some experienced agriculturist will (through that truly valuable agricultural publication, the *Cultivator*,) communicate the result of their experience in the cultivation of the skinless oats. Mr. Holbrook procured four quarts of skinless oats, which I sowed broad cast.—The crop was gathered and taken to the barn, threshed, cleaned and measured; the product is three bushels and a half—the

bushel weighing forty-four pounds. In consequence of a miscarriage when the oats were forwarded, they were not received until the 19th of May, when they were immediately sowed. The land appointed and prepared to receive them, was joining a timothy field; the consequence was, when the timothy was mown down, an innumerable host of grasshoppers took possession of the oats and commenced their usual destructive havoc, which prevented a much greater yield.

Preparation of the soil.—A piece of land from which a large crop of ruta бага was taken last November. As soon as the turnips were taken from the field, we run the plough up and down the furrows, (the turnips being cultivated upon the four furrow system.) The land remained in this state during winter, receiving all the benefits of the frost without exposing the soil to heavy rains, &c. In March, the ridges with a plough, were struck down and harrowed; when ready for sowing, they were formed into eight step lands, ploughed deep and sowed. I must remark, in consequence of the protracted sowing, I formed a composition of sheep manure, ashes, plaster, &c. &c. with which we gave a top dressing to expedite their growth, selecting a proper period according to our judgment, for the application; although we received scarcely any rain from the time of sowing to the time of harvesting, they continued to grow luxuriantly. It may be well to remark, this mode of cultivation is not applicable to all soils, particularly sandy land. Yours, with great respect.

THOS. MITFORD.

Hyde Park, Oct. 15, 1835.

[From the Knoxville Register.]

NATIVE GRASSES.

Among the many improvements and advantages yet to be learned by the agriculturists of this and other Southern States, there is none more important than the cultivation of Grass. Notwithstanding the evident benefit and great saving, it appears exceedingly difficult to persuade our planters of its value. Why it is so, is beyond my conjecture. I am of the opinion that one experiment will entirely remove this obstinacy; and trust, for the benefit of all concerned, that there are few who will refuse one effort, no matter on how small a scale, until it shall be properly estimated. To descant upon its value is unnecessary.

Suffice it to say, that last year I made upwards of eighty tons of excellent "Crab Grass" and "Crowfoot;" the quantity to the acre varying from one to two and a half tons according to the quality of the land.

The late Col. Thos. G. Lamar, of S. Carolina, than whom there were few more practical or scientific farmers, was in the habit of cultivating the "Crowfoot" Grass for many years, and from various trials in comparison with other grasses, gave it a decided preference; and mentioned that "he had kept his carriage horses, (in moderate use,) for six months in excellent order without any other food than this hay," and I am satisfied that after horses become a little accustomed to it, they will prefer it to 'fodder.' Such is my own experience. There is much less wanted. We all know, that have taken the trouble to notice that horses well kept, and particularly those over eight or nine years old, will not eat the stem of

fodder, and in that consists fully one half of the weight of the blade, which at the best does not afford as much nutriment as the hay.

Another, and certainly not inconsiderable advantage is, that you are at no expense for seed, being indigenous. Instead of sending to the north, and paying ten or twelve dollars a bushel for clover seed, waiting until the second year for a doubtful crop, you have only to prepare your ground properly, and in less than ninety days, with a few showers, it is ready for mowing. This is an operation, that few of our negroes understand. It requires more skill than cradling, but little practice is necessary to learn; the most important matter is, to cut even and as near the ground as possible. Two hands can cut and cure from four to five thousand pounds per day. It requires a few hours more sunning than fodder, and when stacked, or housed, is much improved by sprinkling a peck of salt to every 1000 pounds; the sweat that it undergoes in the 'mow' will dissolve it and your stock eat it with more avidity and benefit.

The mode I have adopted in preparing the ground is as follows: First check off the ground with a plough in squares of twenty-five or thirty feet; then haul out the manure in tumbling carts and drop a heavy one horse load in the centre of each; spread it even and plough it in.—This may be done any time between October and May, and will generally produce a crop of weeds. In all the month of June, between the 10th and 12th (if possible) plough it again, harrow it level, and roll it smooth. By the latter operation (which by many is omitted,) the ground is completely levelled, and enables the mower to shave it close, and an inch near the root is equal to two at the top.

Should any of your patrons make the experiment, I trust they will not regret the suggestion of

Your Obedient Servant,

N. B. MOORE.

Richmond Co. April 3, 1834.

IMPROVED BEE HIVE.

At the Agricultural Fair for Albany county, held on the 13th and 14th days of October last, the Committee on Farm Implements, &c., examined an improved bee-hive exhibited by Mr. Levi H. Parish, of Brighton, Monroe co. The committee spoke of it as follows:—

Though not coming exactly within their province, the committee cannot but notice, with high commendation, an improved *Bee Hive*, with a swarm of Bees in it at work, exhibited by the inventor, Levi H. Parish, of Brighton, Monroe county. Externally it appears as a square box. The two ends and back have doors which open upon hinges, the end ones into the interior of the hive, and the back one covers a large pane of glass through which the conditions of the interior, and the operations of the bees may be observed. There is an upper chamber above these doors, which opens by a lid at the top and discloses four boxes, nicely adjusted, into which the bees ascend through apertures, from the main hive, and deposit their honey. These boxes may be taken out and returned at pleasure, without destroying or disturbing the bees, and thus the proprietor may be furnished with a constant supply of truly excellent

honey without diminishing his stock of bees. The bee moth it is believed, is less liable to trouble this than ordinary hives. Channels are cut in the under side of the upper lid, leading to an aperture in the edge, to carry off the rarified and vitiated air which is engendered in the hive. The price of a single right to construct these hives is \$5.

Mr. Parish was in this village week before last with his hive. He was then on his return from New York, where he had exhibited it at the annual fair of the American Institute, and where it was highly commended. The swarm of bees in the hive was of good size. The bees were put in on the 10th July last, and had then made about 100 lbs. of honey. In travelling about, on warm days Mr. P. had opened the hive and allowed them to work. By the means of the upper boxes, honey could be taken from them any time. Mr. P. thinks from 12 to 15 lbs. of honey to be sufficient for the wintering of a hive of bees; but the spring is the best time to remove the honey, when they can soon supply the deficiency. With such a hive every family could be supplied with honey, as it could be set in the chamber of any house, leaving a place for the egress and ingress of the bees.

AFFAIRS WITH FRANCE.

The New York Courier of Saturday last, has the following paragraphs, which we copy, leaving it to our readers to settle the degree of credence to which they are entitled.

MOST IMPORTANT FROM FRANCE.

We are enabled to say, on the authority of one of our most respectable commercial houses, that a letter from London, dated October 28th, received yesterday, by the Josephine, states that a formal demand had been made by our Chargé d'Affaires on the French government, for the payment of the instalments due the United States, as settled by the indemnity treaty. That a long conference was in consequence held between the president of the council, the duke de Broglie, and the minister of finance, M. Humann, and that on the 26th, a refusal was communicated to our Chargé and a full and explicit explanation of the president's message required.

The following paragraphs, confirming that of the Courier, are from a London paper of the 29th October.

PARIS, Oct. 27.—On Sunday there was a long conference between the minister of finance and M. de Broglie, in consequence of a visit made by the Chargé d'Affaires of the United States to the president of the council. It was said that M. Humann, persisted in resolving not to make any payment without obtaining clear and absolute satisfaction.—*Courrier Francais*.

There can be no doubt that Mr. Barton was urgent for an immediate decision of the French government relative to the demands he was authorized to make, and it is not unlikely that he may have obtained that decision in time to forward it by the first of November packet from Havre.

The London Public Leger, of the 28th, says—"It was stated on 'Change yesterday at a late hour, that bills drawn by the American government on that of France, in liquidation of the American claims, had been refused acceptance."

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,	bushel.	2 50	
CATTLE, on the hoof,	100lbs.	5 00	6 00
CORN, yellow,	bushel.	new 85 to 88	
White,	do	85 to 88	
COTTON, Virginia,	pound.	18 1/2	
North Carolina,	"	18 1/2	
Upland,	"	20	
FEATHERS,	pound.	27	40
FLAXSEED,	bushel.	1 25	1 37 1/2
FLOUR & MEAL—Best wh. wh't fam	barrel.	8 00	8 50
Do. do. baker's,	"	7 50	8 00
Do. do. Superfine,	"	6 75	6 87 1/2
SuperHow. st. in good de'd	"	6 87 1/2	
" wagon price,	"	6 62 1/2	
City Mills, extra,	"	6 87 1/2	
Do.	"	6 75	
Susquehanna, firm & scarce	"	6 12 1/2	6 25
Rye,	"	4 62	4 75
Kiln-dried Meal, in hhds.	hhd.	19 50	20 00
do. in bbls.	bbl.	4 25	4 37 1/2
GRASS SEEDS, red Clover,	bushel.	5 00	5 75
Timothy (herds of the north)	"	2 75	3 25
Orchard,	"	2 25	3 00
Tall meadow Oat,	"	2 00	2 50
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.		15 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
Hogs, on the hoof,	100lb.	7 00	7 50
Slaughtered,	"	7 00	7 50
HOPS—first sort,	pound.	12 1/2	
second,	"	10	
refuse,	"	8	
LIME,	bushel.	33	35
MUSTARD SEED, Domestic,	"	5 00	6 00
OATS,	"	42	45
PEAS, red eye,	bushel.		1 25
Black eye,	"		1 25
Lady,	"		
PLASTER PARIS, in the stone,	ton.		3 50
Ground,	barrel.	1 25	
PALMA CHRISTA BEAN,	bushel.	2 00	
RAGS,	pound.	3	4
RYE,	bushel.	85	90
Susquehanna,	"	none	
TOBACCO, crop, common,	100 lbs	5 00	5 50
" brown and red,	"	5 00	7 00
" fine red,	"	7 00	9 00
" wrappery, suitable	"		
" for segars,	"	5 00	10 00
" yellow and red,	"	6 00	8 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	4 75	5 00
" ground leaf,	"	5 00	8 00
Virginia,	"	6 00	
Rappahannock,	"		
Kentucky,	"	8 00	14 00
WHEAT, white,	bushel.	1 50	1 55
Red,	"	1 45	1 50
WHISKEY, 1st pf. in bbls.	gallon.	37	37 1/2
" in hhds.	"	33 1/2	
" wagon price,	"	30	bbls.
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 50	
To Wheeling,	"	1 75	
WOOL, Prime & Saxon Fleeces, ...	pound.	55 to 68	30 to 32
Full Merino,	"	48	58 28 30
Three fourths Merino,	"	45	48 26 28
One half do.	"	40	45 24 26
Common & one fourth Meri.	"	36	40 22 24
Pulled,	"	38	40 23 24

2,000 MORUS MULTICAULIS.

FOR SALE by R. Sinclair, Senr., at Clairmont Nursery, 2,000 Morus Multicaulis trees (the Chinese Mulberry.) These trees are between 7 and 8 feet high, and if planted out this fall might be fed from to advantage next spring. Persons desirous of purchasing, would do well to make early application. Their superiority for feeding silk worms is universally admitted.

nov 24

2t

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par	
Branch at Baltimore,	do	
Other Branches,	do	
MARYLAND.		
Banks in Baltimore,	par	
Hagerstown,	1/2 a	
Frederick,	do	
Westminster,	do	
Farmers' Bank of Mary'd, do	do	
Do. payable at Easton,	do	
Salisbury,	5 per ct. dis.	
Cumberland,	1/2 a	
Millington,	do	
DISTRICT.		
Washington,	do	
Georgetown, } Banks, 1/2		
Alexandria, }		
PENNSYLVANIA.		
Philadelphia,	1/2 a	
Chambersburg,	1/2 a	
Gettysburg,	do	
Pittsburg,	1 1/2 a	
York,	1/2 a	
Other Pennsylvania Bks. 1 1/2 a		
Delaware [under \$5] ...	3 a 4	
Do. [over \$5] ...	2 a 3	
Michigan Banks,	5 a	
Canadian do.	5 a	
VIRGINIA.		
Farmers Bank of Virginia 1 1/2 a		
Bank of Virginia,	do	
Branch at Fredericksburg do		
Petersburg,	do	
Norfolk,	do	
Winchester,	do	
Lynchburg,	do	
Danville,	do	
Bank of the Valley,	do	
Ohio Banks, generally 2 1/2 a		
Branch at Romney,	1/2 a	
Do. Charlestown,	do	
Do. Leesburg,	do	
Wheeling Banks,	1 1/2 a	
Ohio Banks, generally 2 1/2 a		
New Jersey Banks gen. 1 1/2 a		
New York City,	1/2 a	
New York State,	2 1/2 a	
Massachusetts,	2 a 1/2	
Connecticut,	2 a 1/2	
New Hampshire,	2 a 1/2	
Maine,	2 a 1/2	
Rhode Island,	2 a 1/2	
North Carolina,	2 a 1/2	
South Carolina,	2 a 1/2	
Georgia,	3 a 1/2	
New Orleans,	4	

BALTIMORE PROVISION MARKET.

	PER.	FROM	TO
APPLES,	barrel.	—	—
BACON, hams, new, Balt. cured	pound.	11	—
Shoulders,	"	10	—
Middlings,	"	8 1/2	9
Assorted, country,	"	7	8
BUTTER, printed, in lbs. & half lbs.	"	18 1/2	25
Roll,	"	20	—
CIDER,	barrel.	—	—
CALVES, three to six weeks old	each.	3 00	6 00
Cows, new milch,	"	17 00	30 00
Dry,	"	8 00	12 00
CORN MEAL, for family use,	100lbs.	1 75	1 87
CHOP RYE,	"	1 68	1 75
EGGS,	dozen.	—	—
FISH, Shad, No. 1, Susquehanna,	barrel.	7 75	—
No. 2,	"	6 75	—
Herrings, salted, No. 1,	"	4 00	4 12 1/2
Mackerel, No. 3,	"	5 75	—
Cod, salted,	cwt.	3 00	35 0
LARD,	pound.	10	10

RUFFLE OATS.

For seed, may be had at the Maryland Agricultural Repository, Light street, Baltimore, by application to Dec. 8. JAMES MOORE.

GRIST MILLS.

The subscriber has for sale at the Maryland Agricultural Repository, a few of those effective Grist Mills, so much approved of by gentlemen who have tried them. They are adapted to horse-power, and with ease will manufacture 3 bushels of grain into the most beautiful lively meal in an hour. JAMES MOORE.

Dec. 8.

4t.

STOCK OF IMPROVED SHORT HORN DURHAM.

THE editor of the Farmer and Gardener, Baltimore, has for sale two 7-8 and four 3-4 bred cows, 2 full bred and seven 7-8 bred bulls of the improved short-horn breed. They are all fine animals whether regard be had to their milking or fattening propensities. Their pedigrees are indisputable, all tracing to the British Herd book. They will be sold low for cash, their excellence being considered. To any person, company, or society, who may want several, a great bargain would be given.

Letters addressed to the editor upon this subject, must be post paid.

nov 10 4t

THE SILK MANUAL.

JUST published and for sale by Sinclair & Moore and Robt. Sinclair, Jr., at the Maryland Agricultural Repository, Light near Pratt street, Baltimore, a complete Manual of the Silk Culture, in which plain instructions are laid down for the culture of the Mulberry, the feeding of the Silk worms, management of the cocoons, reeling, spinning and dyeing of the Silk. In fine, it is a perfect Manual, and comprises every department of the business. The rules are arranged in so plain and methodical a manner that every one can understand them, and by a very few hours attention become master of the business. It is clearly demonstrated in this Manual, that largely upwards of \$500 may be netted from an acre in the Culture; and it is a singular fact connected with the Mulberry as adapted to the making of Silk, that poor dry, sandy, or gravelly land suits it best, the fabric made from worms fed on leaves raised on such soil, being greatly superior in elasticity and richness of gloss to those grown on rich grounds.

Price—per copy, 50 cents.

Liberal discounts made to the trade.

nov 24

MULBERRY TREES AND SEEDS.

100,000 Chinese Mulberry or Morus Multicaulis of various sizes at reduced prices.

150,000 White Italian Mulberry at very low rates by the 1000 or larger quantities.

200 lbs. White Italian Mulberry seed.

Also the following superior large sized trees which now form a Mulberry orchard—but must be removed:

2000 Chinese Mulberry 3 years old 7 1/2 to 8 feet high.

2000 do do 2 do 5 1/2 to 6 do

2000 do do 3 do and budded on the

White Mulberry which have proved to be much more

hardy than those from cuttings.

These 6000 trees are the greatest acquisition that any silk culturist can possibly obtain, and there is not another equally valuable collection for sale in the Union, as those who have such will not part with them.

50,000 cuttings of the Chinese mulberry at reasonable rates by the 1000, &c.

The New Catalogues of Garden and Flower seeds are just published, comprising the largest assortment ever offered for sale, and including all the choice new varieties. Venders will be supplied in any quantities at very low rates and a liberal credit.

The subscribers will enter into contracts to supply any number of Chinese or White Italian Mulberries on very reasonable terms.

Fruit and Ornamental Trees of all kinds, Garden seeds, Bulbous roots, Green-house plants, and every other article promptly supplied and at very moderate prices.

N. B. Pear trees of large size.—Catalogues will be sent to every applicant.

Wm. PRINCE & SONS.

no 17

4t

TO AGRICULTURISTS.—The analysis of Soils, marls, mineral waters, and other productions, interesting to those engaged in Agricultural pursuits, is performed with promptness and accuracy, by

TYSON & FISHER, Chemists,

no 3 Druggists, No. 192 Market street, Baltimore.

LEON.

THE splendid bull LEON, is now at Clairmont Nursery, where he will remain a few weeks. He is a full blooded improved Durham short horn, and allowed to be one of the best bred animals in the country. He will serve Cows at \$5 each. He is milk white, with a hide as glossy and soft as satin. For his pedigree, see the advertisement, in which he is offered for sale in this day's paper.

no 3

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THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 33.

BALTIMORE, MD. DECEMBER 15, 1835.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, DEC. 15, 1835.

We are indebted to the Rev. J. A. Robertson for the loan of several recent English Agricultural publications, from which we have taken copious extracts, and shall from time to time give them to our readers. We commence with them to-day, and in order to impart to our readers the best possible idea of the peculiar characteristic traits and points of four of the principal breeds of cattle in Great Britain, we have incurred the expense of engravings, one of which we give in this sheet. It is of the Glamorganshire cow, the pride of Wales. The cut was executed by Mr. Horton, and we need scarcely say, that he is an artist of superior claims to eminence, for the faithful and spirited portrait he has given pronounces his eulogium with more eloquence than we could with our pen.

To the Rev. Mr. Robertson, we take occasion here to return our thanks for the generous spirit with which he so politely tendered us the use of his valuable works. He has won from us the richest boon we have to give—our unfeigned gratitude. And as he has come to our land with a view of making it the home of himself and offspring, it may not be amiss to wish that he may be received by the community with whom he has located himself, with that hospitality which makes the emigrant forget that he is in the land of strangers; but of that he is certain, for he has fixed his residence in Virginia—where personal worth always finds a generous welcome.

CULTIVATION OF CLOVER.

We hear the complaint frequently made from the south, that clover will not stand the heat of the summers in that quarter. This objection to its culture, may, we think, be very easily obviated. Clover, like orchard grass, delights more or less in shade, and should have partial protection when sown in a situation exposed to the influence of an intense sun. An orchard would give

it the requisite shelter; but where it is necessary, in a locality where the sun has great power, to sow it in the open field, if sowed with the tall meadow-oats, we are of opinion that sufficient seclusion from the scorching solar rays would be effected. The experiment would be an easy one, and we should be happy if some of our southern readers would make one the coming spring and favor us with a report of their success.

EXPERIMENTS REQUESTED.

We should feel greatly indebted to those of our readers who cultivate corn, and have sufficient love for the science of agriculture, to make an effort to advance its interests in this important branch of it, to make, each, an experiment, in the culture of one acre, with the view of increasing the quantity of corn by decreasing the distance of the rows and hills.

We propose that they each should lay off an acre of ground, plough it up in broad furrows, let it lay during winter to be mellowed by the frost. In the spring, early, haul out manure from the stable or barn-yard, say 20 double cart loads, spread it evenly over the surface, then plough it in so as to cover the manure well. When it is time to plant the corn, take the grain and soak it in a solution of soot, sulphur, and salt, for twelve hours, drain it, and roll the corn in plaster. List the ground three feet apart each way; put into the intersections of the furrows a quart of ashes, plant six or eight grains of corn therein, then cover it up, when the corn breaks through the earth, sprinkle on the top of each hill a small quantity of plaster, say two bushels to the acre, and when the plants get big enough, thin them out so as to leave 4 plants at each intersection; plough once so as to throw the furrows up against the corn, use the cultivator afterwards so as to keep the ground open and clean of weeds, taking care not to injure the tender roots. Having made the experiment, we shall be further indebted to them to carefully measure the produce next fall and make report to us thereof. A quart of ashes to the hill will be to the acre but 151 bushels, and if the season be favorable, the locality of the acre to be experimented upon a good one, and the soil a congenial sandy loam, or alluvial bottom, we predict that an equal quantity of corn will be grown:—at all events, under these auspicious circumstances we will promise a yield of 100 bushels.

A COSTLY TULIP.

It is stated in the British "*Farmer's Magazine*," that a new tulip, raised by M. Patrix, a gardener at Ghent, and which the Society of Florists of the town has named the "Citadel of Antwerp," has been purchased by M. Vandernineck, a horticulturist of Amsterdam, who was formerly a captain in the Dutch navy, at the price of 16,000 francs, which is equal to \$3,900.

The article which we copy into this day's paper from the September number of the British "*Farmer's Magazine*," on seed wheat, is worthy of the most careful perusal of every grower of that great staple product of our country. The remarks though addressed to the British reader and intended in their application to be local, are equally as well adapted to our people and country. That there is too little attention paid to the selection of seed of all kinds by many of our agriculturists, there can be no question, and that there is a consequent reduction in amount of produce some years, as well as a deterioration in the quality of many articles raised, there can be as little doubt; hence the necessity of increased care on the part of those engaged in farming to this essential part of their business. If there were more attention there would be no occasion for going abroad for seed of any kind; but so long as this indifference prevails, there is but little to be expected, of which we need be proud as a nation of husbandmen. While upon this subject, we will mention a fact which was communicated to us by a subscriber in North Carolina. He informed us that a neighbor of his, had given rise to a new variety of wheat by merely selecting in the first instance from his field a head of wheat of peculiar excellence, the grains of which he carefully sowed in drills in his garden, and selected the best heads (those which resembled the original most) of the succeeding year's produce, and sowed them in a bed purposely prepared, remote from his other wheat, a few years. Thus he has originated not only a new variety, distinct in its appearance, but of excellent quality withal. Careful small farmers in Europe, not unfrequently go through their fields and select their seed wheat by heads: this cannot be expected to be done by our large growers of wheat, but increased vigilance in the selection of their seed, would do them no harm, and would not fail to benefit the country.

GLEANINGS FROM EUROPEAN WORKS.

THE GLAMORGANSHIRE CATTLE.

As we have very recently published a very full account of this excellent breed of cattle, the present will be but brief, merely sufficient to enable

the reader to comprehend the spirited portrait of a valuable Glamorgan cow belonging to the Royal dairy at Windsor, which we give below. She is said to be a faithful representation of the present improved breed of Glamorgan dairy cattle.



"The Glamorgans were once in high repute, and deservedly so. George III. who was a good judge of cattle, was very partial to them, and one of his agents yearly visited Glamorganshire, to keep up his majesty's stock by a selection of the best cattle that county could produce, and the farm at Windsor is still frequently recruited from this district. [Their present great improvement is owing to the indefatigable exertions, and consummate tact and skill of Mr. David, of Radyr.] The result of his attempts has been, that, in the recent exhibitions of stock at *Tredagar*, the revived and pure Glamorgans have often competed with the short-horns and the Herefords; and Mr. David has received at Sir Charles Morgan's cattle shows, no less than twelve silver cups for his Glamorgans.

The present fashionable Glamorgans have been produced by a cross upon the Glamorgan heifers by the Ayrshire bull. The result of which is, that they give more milk than the old Glamorgans, are hardier, and are kept at much less expense in the winter, and easier fattened and much better adapted to the coarse fare afforded by the Glamorganshire farmer. They feed kindly—the flesh and fat are laid equally over them—the beef is beautifully marbled, and the average yield of milk given by a Glamorgan cow is about 16 qts. of milk per day.

Only a little while ago four Glamorgan oxen ploughed with ease half an acre of clover lay in two hours and three quarters.

They are of a dark brown color with white bellies, and a streak of white along the back from the shoulder to the tail; white faces; clean heads, tapering from the neck and shoulders; long white horns, turning upwards, and a lively countenance; dewlaps small; hair short, coat silky."

[For a more full account see pages 155 and 198 of the current volume of the Farmer & Gardener.]

MONOMANIA IN HORSES.

The following curious facts are extracted from a paper by professor *Rodet*, in the *Veterinarian*:

In 1806, during the campaign of Austerlitz, a Piedmontese officer possessed a beautiful, and, in other respects, a most serviceable mare, but which one peculiarity rendered at times exceedingly dangerous for the saddle. She had a decided aversion to paper, which she immediately recognised the moment she saw it, and even in the dark if one or two leaves were rubbed together. The effect produced by the sight or sound of it was so prompt and violent, that in many cases she unhorsed her rider; and in one case, his foot being entangled in the stirrup, she dragged him a considerable way over a stony road. In other respects, this mare had not the slightest fear of objects that would terrify most horses; she regarded not the music of the band, the whistling of the balls, the roaring of the cannon, the fire of the bivouacs, or the glittering of arms. The confusion and noise of an engagement made no impression upon her; the sight of no other white object affected her; no other sound was regarded; the view or the rustling of paper alone roused her to madness. All possible means were employed to cure her of this extraordinary and dangerous aberration without success; and her master was at length compelled to sell her, for his life was in continual danger.

A mare belonged to the Guard Royal from 1816 to 1821. She was perfectly manageable, and betrayed no antipathy to the human being, nor to other animals, nor to horses, except they were of a light grey color; but the moment she saw a grey horse she rushed upon it, and attacked it with the greatest fury. It was the same at all times and every where. She was all that could be wished on parade, on the route, in the ranks, in action, and in the stable; but such was her hatred towards grey or white horses, that it was dangerous to place them in the same stable with

her, at whatever distance. If she once caught a glimpse of one, whether horse or mare, she rested not until she had thrown her rider or broken her halter, and then she rushed on it with the greatest fury, and bit it in a thousand places. She, generally, however, seized the animal by the head or by the throat, and held it so fast that she would suffocate it if it were not promptly released from her bite.

As she grew old (for she was eighteen years old in 1821,) this mania was not quite removed, but it was somewhat weakened. No other body of a white color appeared to make the least impression on her.

A mare belonging to the 5th squadron of hussars, feared, on the contrary, all white inanimate objects—such as white mantles or coats, even the sleeves of shirts and chemises too much displayed, and particularly white plumes. When any of these white bodies, and especially in motion were suddenly perceived, if they were of any magnitude, and their motion was rapid, she was in a dreadful fright, and strove to escape, but if they were of no great size, and moved more gently, she rushed furiously upon them, struck at them with her fore feet, and endeavored to tear them with her teeth. No other colors produced the slightest effect upon her, nor did the appearance, however sudden, of white horses or dogs of the same color; but if a white plume waived, or white sheet of paper floated by her, her fear or rage was ungovernable.

These three cases of singular and particular aversion, possess in my mind, all the characters of true monomania.

[From the Farmer's Magazine for September, 1835.]

SEED WHEAT.

Three years ago Colonel *Le Couteur*, one of the deputies from the island of Jersey, became acquainted with professor *La Gasca*, one of the most celebrated botanists in Europe who had been Curator of the Royal Gardens at Madrid, and obliged to leave Spain, where he is again restored to his friends and to his former situation. The Professor was then growing about 80 sorts of wheat in the garden of Mr. Saunders, nurseryman in Jersey. Their variety, classifications, and beauty, struck Mr. *Le Couteur*, who sought to acquire all the information he could from Professor *La Gasca*. The latter told him that for the last twenty-five years he had been employed in studying the properties and character of wheat, and had collected in the Royal Gardens upwards of nine hundred varieties and sub-varieties. He came to Col. *Le Couteur's* farm and picked out more than twenty sorts out of three fields, then (in August) growing; and gave daily all the instruction and information wanted by Mr. *Le Couteur*, who resolved on profiting by such an opportunity, and began seriously to cultivate the important plant of wheat, so as to procure the several sorts distinct from each other, and keep notes of the experiments made on the culture, produce, weight of the grain, and qualities of the corn, flour, and straw. Colonel *Le Couteur* has kept a most minute account of his experiments, and taken the greatest care to preserve the best sorts and in their purity. He has in London nineteen varieties of the greatest beauty, and such as the frequenters of Mark-lane say could not be matched in England for purity. They consist in,

- No. 1. White Compact. Tremois, or spring wheat
2. Red Tremois, or do.
3. Long eared do.
4. Dantzic. Winter Wheat. *Triticum Hybernium*
5. Small round do.
6. White Seedling. *Coturianum Hybernium*.
7. Koeleri. *Loturianum*.
8. Koeleri Red.
9. Koeleri White.
10. Long-eared Liver-coloured.
11. Red compact.
12. Golden.
13. Koeleri Compactum *Belvuensis*.
14. *Cesarienses*.
15. (No. 6. c.)
16. Red ear (white grain or Sark wheat.)
17. Red compact (No. 9.)
18. Koelri (sub. yellow.)
19. (No. 11.)

The Colonel, after three years' experience, has arrived at this conclusion, that the proper cultivation of wheat is yet unknown or unpractised. That it is of consequence to keep the several sorts to grow apart, because they all ripen at different periods, and that bread made of ripe and unripe corn could neither be so wholesome or nutritious as when made of ripe corn, without the mixture of that which had not well ripened. That each sort requires, or will thrive best in a particular soil and situation adapted to each. That one ear of a superior variety, sowed grain by grain and suffered to tiller apart, produced four pounds nine ounces of wheat. Whereas, another ear of an inferior sort, treated in the same manner, produced only one pound thirteen ounces. Hence it is of importance to select the sorts that are the most farinaceous and productive. That by sowing each sort apart they might be easier saved and harvested, in rotation, some sorts ripening a fortnight before the others. The same quantity of wheat of a farinaceous kind may maintain a family of fifteen persons twelve months; where the same quantity of another kind, though apparently fine corn, will maintain them only nine months. From the superior soil and climate of the Channel Islands, Col. Le Couteur thinks that, by growing none but the best kinds and keeping them perfectly true and pure, the Islands might be made to produce the most approved seed corn for Great Britain. The Islands might thus become of the greatest benefit to the United Kingdom, and can never be objects of jealousy, as to the fear of large importation from them, since the extent of all the land susceptible of cultivation in all the Channel Islands together does not much exceed 25,000 acres, and that the greater part must necessarily be occupied by the meadows, orchards, and vegetable gardens of all sorts, absolutely necessary for a population of more than sixty thousand inhabitants.

DAHLIAS.

We insert an extract from a communication in the December number of the "*Horticultural Register*," upon the culture of those beautiful flowers. We have taken all that part which relates to their cultivation, and we most cordially agree with the author, Mr. Joseph Breck, of Boston, that "we are

too apt to follow the directions of English books, without considering the great difference in climate"—that instead of consulting nature and conforming to the dictates of common sense, we too often blindly follow instructions not at all suited to the habits of the flower or shrub which is the object of our care. It is too much the practice of European gardeners to weave an air of mystery around the most simple thing in horticulture, and hence their long string of precautions in raising Dahlias. These are all superfluous. It is only necessary to look at its foliage to reject at once every thing that savors of difficulty. Place them on moderately moist rich loam, well manured, give them plenty of air and sun, and water, and keep them free from weeds, and the earth occasionally stirred, and all that is necessary will have been done to secure fine blooms of this much admired flower.

Before copying the extract in question, we will take time by the forelock, to observe, that Mr. Robert Sinclair, Jr., will receive by the first packet in the spring, a selection of upwards of two hundred different varieties of the *Dahlia*, of the most superb kinds, selected with the greatest care by one of the most distinguished florists in Europe. He has been influenced in making this importation by the laudable desire of meeting the public expectation, and gratifying the taste of the lovers of Flora.

"ON THE CULTIVATION OF THE DAHLIA."

So much has been written upon the cultivation of this magnificent flower, that it may be thought unnecessary to add any thing more; but having for three years past been successful in producing a splendid bloom for more than two months of the season, and wishing its cultivation may become more extensive, I am desirous of communicating to the public my experience in this branch of floriculture.

We are too apt in this country to follow the directions given in English books, without considering the great difference of climate. Following these directions myself, I failed in their cultivation, and was upon the point of giving it up in despair; the few and imperfect flowers produced did not seem to pay the trouble and expense.

Instead of planting without manure, as I did formerly, I plant in a good rich soil, and add unfermented manure. The most of my dahlias have been planted on the same spot, for three years past—on each side of a broad avenue: thus arranged, with the various colors properly mingled, I think they produce the finest effect, and are more easily viewed than in any other mode of arrangement. If planted in masses, with the lowest growing set in front, with a shrubbery in the back ground, the effect is pleasing; in this way my less choice varieties were planted.

About the middle of May I get my ground in readiness, by ploughing or digging, it having been well manured the year before. On each side of the avenue, I dig a row of holes, four feet from each other, about one foot deep, into which are

thrown two shovelfuls of coarse manure from the cow-yard and horse-stable, mixed together; the sides of the holes are dug down and incorporated with the manure. A hole is then made in the centre of each with a bar, and a substantial chesnut or pine stake five feet long put firmly down for the future support of the plant.

I then take light pine poles, twelve feet long, and tie horizontally from stake to stake near their tops with rope yarns, and others half way to the ground, in the same manner. Thus I have a sort of trellis in readiness to confine my dahlias as they increase in size, and secure them from damage by wind. If attention is given to have the stakes range with the avenue, whether straight or winding, and the poles tied on with some regularity, their appearance is not unpleasant even before covered with foliage. The holes are filled up, and the ground raked over, and all is ready for planting.

If tubers are planted without starting in a frame, they may be put out any time from the middle of May to the first of July. Some planted at the last date this season, produced an abundance of flowers. The tubers should be covered about three inches deep; only one sprout should be permitted to grow.

The best way is to forward the plants in pots in a moderate hot-bed, either from divisions of the root, or raised from cuttings. The last way I prefer, as they come in flower full as early, and produce finer flowers. The plants may be turned out of the pots any time in the month of June, or the beginning of July. If dry weather succeeds, as it did last season, I give plenty of water on the evening of each day. As the plants advance in height, the lateral branches are all pinched off with the exception of a few, which are left to be trained fan-fashion to the trellis. The stems must be securely fastened from time to time, or they will be liable to be broken off by the wind.

After the bloom commences, except tying, very little care is necessary; the ground should be kept clean. I think the trampling of the ground occasioned by the tying, pruning and examination is beneficial, as the moisture is thereby retained. My dahlias began to show flower this year about the first of July, but not many of them were fine and perfect the whole month.—During the month of August, nearly all in my collection were in full flower, and for quantity and quality I think I may safely say were unequalled. They received a check the 16th of September by a hard frost, from which they did not recover; many fine flowers, however, opened after this, but were finally destroyed about the 1st of October.

I must confess that I have not succeeded to my wish in blooming some of the striped varieties and should like information from those who have had better success. *Picta formosissima* did not produce one in twenty that could be called regularly striped flowers. I had a few that were very much admired, distinctly striped with orange and scarlet.

Levick's Commander in Chief produced only one fine striped out of at least thirty very dark, almost black flowers; this was extremely beautiful, being regularly striped with a brilliant crimson.

Most of the edged, spotted and shaded varieties

succeeded well. The self-colored I think most desirable, with few exceptions, for small collections.

About the last of October or the first of November, I take up the roots. It is important to have them secured before the ground is frozen in any degree; if there is a prospect of severe weather before that time, the earth should be thrown up round the stems to protect them. As fast as they are dug I convey them to a dry, open cellar, and place them upon boards; in this situation they remain about three weeks, when they will be sufficiently dry; they are then packed in boxes with dry tan, and kept where they will be secure from frost.

In this way I have preserved the roots in good order for eight months.

The dahlias upon the avenue were in a very airy place, fully exposed to the sun; the soil a brown loam. Some planted on the same ground without manure and pruning, produced but few flowers in connection with the others.

PRESERVING ROOTS.

We find in Chaptal's *'Chemistry applied to Agriculture,'* an excellent chapter on the preserving of animal and vegetable substances. We extract the following from the preliminary remarks.

'The nature of all bodies which have ceased to live or vegetate, are changing, as soon as the physical or chemical laws by which they are governed cease to act; the elements of which they were composed then form new combinations, and consequently new substances.

'While an animal lives, or a plant vegetates, the laws of chemical affinity are continually modified in its organs, by the laws of vitality; but when the animal or plant ceases to live, it becomes entirely subject to the laws of chemical affinity, by which alone its decomposition is effected.

'The principles of the atmospheric air which is imbibed by the organs of living bodies; whether animal or vegetable, are decomposed and assimilated by them, while dead bodies are decomposed by its action. Heat is the most powerful stimulant of vital functions, yet it becomes, after death, one of the most active agents in the work of destruction. Our efforts, then for the preservation of bodies, ought to be directed to counteracting or governing those chemical or physical agents, from the action of which they suffer; and we shall see that all the methods which have been successful, are those which have been formed upon this principle.

'The chemical agents, which exert the most powerful influence over the products of the earth are air, water, and heat; the action of these however, is not equally powerful over all classes of plants: the soft and watery, and those which approach the nearest to animal matter, decompose most readily; the principles of such are less coherent, less strongly united than that of others; so that the action of disorganizing agents upon them is prompt and effectual.

'All the methods now employed for the preservation of bodies, consist in so far changing their nature, as to deprive them of the elements of destruction contained within their own organs; or in secluding the substances to be preserved from contact with the destructive agents mentioned in

the preceding paragraph; or in causing them to imbibe certain other substances, the anti-putrescent qualities of which counteract all action, whether internal or external.

'In all vegetable products, water exists in two different states, one part of it being found free, and the other in a state of true combination; the first portion, not being confined except by the covering of the vegetable, evaporates at the temperature of the atmosphere; the second is set free only at a temperature sufficiently high to decompose the substances containing it, the first, though foreign to the composition of the vegetable, enters into every part of it, dissolving some of its principles, serving as a vehicle for air and heat; and being converted by cold into ice; by these several properties it greatly facilitates decomposition; the second portion, from which no evil of the kind arises, is found combined and solidified in the plants, and its action is thus neutralized.'

Drying fruit, then, in order to preserve them, consists in depriving them of the water contained in them in a free state. This may be done by subjecting them to heat not exceeding 94 to 113°—either by exposing them to the sun, or in a stove room, or in ovens, which latter practice is resorted to, even in the warmest countries, at the commencement of the drying process. *In preserving the apple*, for instance, our author adds, that by depriving their surface of all moisture before putting them up, keeping them in dry places, where the temperature will be constantly between 50 and 54°, and by separating the fruits that they shall not come in contact, they may sometimes be preserved 18 months. The farmer in Schoharie, who has been in the habit of bringing the Spitzenbergh to our market on the 4th of July, owes his success to the observance of these rules.

On the preservation of the fruits of the earth by secluding them from the action of air, water and heat, M. Chaptal enumerates the following leading causes of decay.

'The atmospheric air, coming in contact with fruits, deprives them of their carbon, and forms carbonic acid.

'Fruits exposed to the solvent action of water suffer decomposition, by having the affinity existing between their constituent principles weakened, and at length destroyed.

'Heat dilates the particles of bodies, and thus diminishes the force of cohesion and attraction, and favors the admission of air and water.

'The combined action of three agents produces very speedy decomposition; the effect produced by any one of them is slower, and the results different. So that in order to preserve fruits from decomposition, it is necessary to guard them from the power of these destroyers.'

Practically applied, these axioms teach that to preserve roots in good condition, the following precautions should be observed:

1. That their surface be entirely freed from moisture before they are housed or buried, and that they be deposited in a dry situation, where water will not have access to them.

2. That they be excluded from the air, by burying them in dry earth, or slightly covering them in the cellar with earth. And

3. That they be kept in a cool temperature—the best range from 34 to 45 deg.

We frequently hear house-keepers complain, that their potatoes, turnips, and other vegetables, soon deteriorate, and lose their fine flavor, after they have been a short time in their cellars. This is a natural consequence of the injudicious way in which they are too frequently kept—exposed to the atmosphere, and to a high temperature, in a cellar adjoining the kitchen, or perhaps in the kitchen itself. Again, potatoes or turnips buried in a wet condition, or the latter with parts of their tops left on, are very liable to ferment and spoil. We find it to be a necessary precaution in burying turnips, to make one or more holes in the crown of the pit, to let off the rarified air and abate the heat which is almost invariably generated on their being buried.

In preventing the total loss of potatoes that have been affected by frost, Thomas Dallas directs, that when they are slightly touched by the frost, it is only necessary to sprinkle the roots with lime to absorb the water under the skin; that when the outer portion of their substance is frozen, the tubers may be pared and thrown for some hours into water slightly salted; and that when they are wholly frozen, they will yield, upon distillation, a spirituous liquor resembling the best rum, and in greater quantities than roots which have not been frozen.

The quotations we have made above are invaluable to the farmer and house-keeper; and if the principles which they establish are understood and practised upon, we shall have no cause to regret the length to which we have extended this article.

Cultivator.

INFLAMMATORY DISEASES OF THE HORSE.

The inflammatory diseases of the horse are numerous, but his fevers are few; a febrile state being generally brought on by the inflammation of some important organ. Inflammation may be considered as general or diffused, and local or confined, and both seem to arise from an affection of the blood vessels, and perhaps from a peculiar state of the blood itself.

General or diffused inflammation constitutes fever or extensive inflammatory affection, and appears to consist in an increased action of the heart and arteries, accompanied with an increase of heat. In some instances where the fever is purely symptomatic, and dependent on the inflammation of some important organ, as the lungs, or the intestines, the circulation appears retarded rather than increased, from interruption arising to its passage through the heart.

Local or confined inflammation is also dependent on an affection of the blood vessels, but confined principally to the blood vessels of the part affected.—It is betokened by redness in the skin, tumor or swelling, heat and tenderness, with pain. Inflammations, both diffused and local, are brought on by excitements, such as over feeding, excessive heat, reaction produced after cold, and the reaction produced by inordinate exertion. Those more exterior, arise from injuries, the application of improper substances, &c. Inflammations terminate in various ways; but it is to be remarked, that in consequence of the very large circulatory system of the horse, his febrile affections rage higher, and terminate sooner than in man. The usual termination of inflammatory affections in the horse, are by resolution, effusion, suppuration, and gangrene. Schirrus is not at all a common termination of inflammation in the horse.

Inflammation of the brain, (phrenitis) brain

fever, phrensy fever, staggers, mad and sleepy. There are few diseases more likely to be mistaken by inexperienced farriers than this; it is not to be wondered at, therefore, if indifferent persons should be led into error by it. It appears in two forms, a violent frantic one, and a sleepy lethargic one, and the latter appearance is also common to a disease, not dependent as this is on idiopathic inflammation of the brain; but on a paralytic affection of the stomach, and thence is called stomach staggers. This latter affection, however, may be distinguished from the former by attending to the color of the eyelids, nose linings, mouth, &c. which in stomach staggers are usually more yellow than red; whereas in sleepy staggers, they are more red than yellow. Inflammation of the brain shews itself in general cases by disinclination to food and motion, drowsiness, accompanied by a heaviness and closing of the eyelids, with moisture and redness of them; and also of the linings of the mouth and nose. Sometimes these symptoms increase, until the horse becomes comatose, and after a few frightful struggles, sinks to rise no more. In these cases the pulse is apt to be oppressed instead of increased. But most frequently after the first stages he becomes furious, plunges about, and is vicious to himself and others, approaching to a state of madness, in which state he continues till he sinks from his own exertions, when he rises again to renew his violence.

The cause of staggers may be various: the immediate are either an original accumulation of blood within the brain, or the translation of the inflammation of some organ to the brain: as a remote cause is often brought on by too full feeding, without sufficient exercise, and particularly in horses at one time working very hard, and at another suffered to remain inactive; but which horses, whether used, or not, are equally fed. Sudden cold, violence, &c. may bring it on.

The treatment of staggers should be begun by abstracting a very large quantity of blood promptly, by opening both jugulars, and letting the horse bleed to the amount of ten or even twelve quarts; repeating the same until the delirium ceases. After the first bleeding, back rake, throw up a laxative clyster. (*Vet. Pharm.* 143.) Blister the head, promote a current of fresh air in the stable, and treat altogether as directed under other febrile affections.

Lock jaw stag-evil or tetanus, arises from cold, excessive fatigue, sometimes perhaps from worms, but more often from a wound of some part, as pricks in shoeing, &c. Such wound is seldom in a recent state; but after two or three weeks continuance, sometimes after it has healed even: it follows docking, gelding, and nicking frequently; and is preceded by a flabby unhealthy state of the wound. It appears as an affection of the brain, which transmits its morbid irritation, particularly to the nerves attached to muscles, by which they become cramped, or may be considered as in a high state of action, giving the horse a peculiar look of energy, as though immediately stopped from full speed; with his nostrils extended, his head raised, and his nose carried forward; his legs straddle wide and his tail is cocked and quiver, as after violent exercise. The jaws will now be found, if not closed, yet nearly so, when it is called *jaw set*.

The treatment is not often successful, but, however, it is sufficiently frequent that it is so, to deserve the utmost attention. Blaine informs us that enormous bleedings have succeeded; but he places his principal dependance on the application of cold by means of ice, or of constant dashing with cold water, with an active blister applied the whole length of the spine. Balls of camphor and opium, to the amount of two drachms each, may be given every three hours. If any room remains in the mouth, the ball may be passed up by means of a stick, or it may be given as a drink by means of a syringe, and even when the mouth is entirely closed, he informs us we may give a drink by the nostrils. Moorcroft used cold also. Fearon, on the contrary, has experienced benefit from a bath, heated to ninety degrees, and kept at that temperature for three hours. White recommends camphor and opium; Wilkinson of Newcastle, has been very successful by keeping up heat and stimulus over the skin in general, by means of a newly stripped sheep skin put on hot. Perhaps if the body were previously rubbed with oil of turpentine one part, and common oil two parts it might assist Wilkinson's plan. When lock jaw arises from nicking, it might be prudent for a veterinary surgeon to dissect down on the nerves of the tail, and divide them; and when from nicking it would be advisable to cut off another portion of the tail, which practices in both instances would afford a moderate chance of saving the animal. It is necessary further to remark, that it is of great consequence that the bowels be kept free from feces, by raking and clysters. With regard to the latter they are very important in this disease, as a medium, commonly the only one, of giving support. A horse has been kept alive on nourishing clysters alone, for seven or eight days. (*Vet. Pharm.* 145.)

[From the Farmer's Register.]

ON THE ADVANTAGES TO BE DERIVED FROM THE ESTABLISHMENT OF AN AGRICULTURAL PROFESSORSHIP.

Barboursville, July 23, 1835.

SIR—It has been a settled conviction on my mind for years, that a professorship of agriculture—a pattern farm, and such a paper as yours, united therewith, would be productive of incalculable benefit to the commonwealth. The space of a letter is too confined to admit of one half being stated. Suffice it to say, it would elevate the science, add dignity to the pursuit, call off from encumbered vocations a portion of the mind of our citizens now lost to the community; present a rallying point for all the scattered information of the land; reduce to the test of experiment every theory plausible enough to justify it; by the same standard to prove the value of every discovery or improvement; promote economy by causing one experiment for many; a certain and rapid communication, through the state, of the results; furnish a sure means of ascertaining the nature of our climate; the quantity of rain falling in the year; the seasons when drought most generally prevails; and by consequence, furnish data to guide the husbandman in the cultivation of crops, both as to time and kind. But I must stop—for I find no end to the advantages that would result from such an establishment.

Let me, however, add one more. All these things are to be done before the youth of Virginia—the future men of this commonwealth, destined eventually to influence her destiny. A portion of these, selected from every part of the state (say one to each congressional or senatorial district,) of promise, but unable, from poverty, to educate themselves, to become the adopted children of the state, would be able by alternate labor and study, alike to keep up the farm, and to improve themselves. Indeed, it is worthy of the profoundest consideration, whether every student of the University would not profit by a few hours' work daily, in the proper season. These being my views, I submit to you whether it does not behoove the tillers of the earth to make an effort to induce the legislature to attend to their neglected interests. How is this to be done? I answer, as every other sect effects every thing, by conventions—to that alternative we must also resort. What say you to such a convention, to meet in Richmond the first Monday in January? Let any one who feels an interest in the object, attend. Let each agricultural society in the state be represented there. If it be asked what good can come of it, the answer is, let us try it. A free communion of the intelligence of the land cannot be altogether unproductive of good fruit. Apart from what can be done by such a convention on its own means, an appeal may be made to the legislature under the weighty sanctions of their united wishes, to do something for us. If the view which I suggest is esteemed impracticable, they may incorporate an agricultural society in each congressional district, and award a small sum to each, to be distributed in premiums, after the manner of New York and other states.

But it is objected that it will cost something. Have we not as a class offered our fleece annually, without a murmur, to be appropriated to other improvements? Is it unreasonable that in turn we should require a small portion of our own to be applied to our peculiar benefit? A small portion of the interest paid annually by the University, would in a few years put our scheme completely in operation, and I verily believe after that it would be able to support itself. However, all these things might be discussed in convention, and digested in a form that would be most acceptable. And I may be permitted to add, that for once we should have a convention whose sole object would be the good of the country—a spectacle so singular in these times, that it could not fail to be as consolatory as the oasis to the weary traveller of the desert.

If you agree with me on this point, you can greatly promote the object by inviting the meeting in your journal. If I thought my name would be of any service, you would be at liberty to use it with my remarks. But I fear not. However, do as you please. I have it much at heart to do something. Better heads than mine may suggest better plans, to which I will most cordially submit.

Accept assurances of my high consideration,
JAMES BARBOUR.

SALT YOUR CORN.

Mr. Brown of this vicinity, communicated some information to us, in a conversation recently held with him, in regard to the use of salt in corn

which is put away in the husks, which may be interesting to the public. He stated that he received last year a quantity of corn which he had purchased in so wet a state, that he was apprehensive that it would spoil. He remembered that it was a common practice in Pennsylvania, when hay was put away somewhat damp, or not fully cured, to sprinkle salt on it, and that such hay generally kept well, and that horses and cattle were very fond of it; he therefore concluded to try the experiment on his corn. He accordingly, as his corn was thrown in a pile on a large floor sprinkled it with salt, using from a half to a bushel of salt to five or six hundred bushels of corn. The corn kept well, never became musty, and never had any weevil in it. Mr. B. said he had some of this corn when he communicated this information to us; and he stated that the bread which it then made is so sweet and good that it was esteemed preferable to new corn; he also stated he was not under the necessity of purchasing any fodder for his working oxen last winter, they fed upon the husks of this corn so freely; and he added that they kept in excellent order. Mr. B. was so well pleased with this experiment, that he is putting up all his corn this year in the same manner, using about half a bushel of salt to 500 bushels of corn, which he thinks is enough.—*Albany Cultivator*.

[From the New England Farmer.]

LARGE AND SUCCESSIVE CROPS OF INDIAN CORN, RYE AND HAY.

Mr. Fessenden.—Dear Sir: If you see fit to publish the whole, or any part, of the subjoined communication, it is altogether at your service.

The following system of cultivation, by which three valuable crops of Indian Corn, and Rye, and Clover, may be obtained in two years, I would recommend as highly deserving of trial by farmers generally.

While once on an excursion on the river Merimack, and at Haverhill, I was politely shewn by Mr. David Howe, his spacious and well stored barns, and large stacks of hay, the produce of his extensive and fertile fields, lying on that river, which were cultivated by this same or a very similar mode.

In the spring of the year early, or what would be preferable, in the course of the preceding autumn, or winter, the manure, in a suitable quantity, is applied equally over the whole surface of the field, and intimately incorporated with the soil by repeated but not deep ploughings and harrowings. At the suitable time for planting, the whole field is again ploughed and furrowed, in rows 4 feet asunder, and again cross-furrowed in rows at the same distance, and the corn is immediately dropped in the hollows, which are formed by the intersection of the cross-furrows, and covered to the usual depth if it be big.

At weeding time, the corn is earthed up a little, and nearly to a level with the surrounding field. It is twice hoed afterwards at the suitable periods, but *never killed*. At the last hoeing the ground is rendered perfectly clean and level in every part. Winter rye, and clover, and other grass seeds, are now sown over the whole field in suitable quantities, and covered by drawing a bush harrow between.

In autumn a large crop of corn may be expected, and in winter when the ground is frozen, with a well sharpened hoe, the stubs of corn are cut close to the surface. Early in the next summer, the rye was repeated, yielded a good crop, and at midsummer, when the heads of the clover are half turned to a brown color, the whole fields, clover and rye stubble intermixed, are mown; the whole together constituting a large crop. The rye stubble absorbs the juices and the flavor of the clover, which it retains, thus becoming highly palatable and nutritious, and forming, when all are well made a large amount of food, of a quality superior for horses, and other domestic animals.

Thus are three crops produced in two years, and on the same ground, where, ordinarily, but two crops are yielded, and all with a diminished amount of labor and expense.

The clover being a biennial plant, a large crop of hay is produced in the third year from the other superior kinds of grass which were sown.

It is admitted that where large crops of Indian corn are desired, *hilling up* should never be practised, but the ground in all the latter stages should be preserved perfectly level, neither should the ground be ploughed after the first hoeing, but only harrowed lightly, or slightly stirred with the *cultivator*, an admirable instrument, intermediate between the harrow and plough; that the roots which will be found extending at a little distance beneath the surface, in every direction, may be suffered to remain unmolested.

The rye, and the clover, and other grass, serve as a mutual protection to each other, during the severe and open winters.

Very respectfully, your friend,

WILLIAM KENRICK.

Nonantum Hill, Newton, Nov. 26, 1835.

FATTENING HOGS.

One peck better than two—As farmers are fattening their hogs at the present time, and as economy in this business is of the utmost importance, it may not come amiss to remind them of an experiment tried and related by that exact Agriculturist, Revd. Henry Colman, formerly of Salem, now on the Connecticut river, in Mass.

He found, while cooking meal for his swine, that if he took one peck of meal and put into a kettle containing five pailfulls of water, it produced nearly as great an effect in fattening hogs, as one half bushel boiled in the same quantity of water,—probably because it became more thoroughly cooked. The editor of the Genesee Farmer, after making mention of this, quotes the following from the British Farmers' Magazine. "I always feed my pigs on sour food, which I have invariably found to fatten them faster and make the flesh firmer and whiter than when given in any other state—the potatoes are steamed, and while quite hot, are beaten to a pulp, and mixed with bran in the proportion of 23 lbs of bran to 240 lbs (or nearly four bushels)—This mixture is put into a vat to remain ten or twelve days, until quite sour; it is then fit for feeding—If the quantity of meal is greater than the potatoes will moisten, water should be added to make a thick paste; but it must never be given until fermented."

A great number are now trying the apple sauce plan, and we doubt not with good success—we hope they will also be exact in their experiments upon this subject; it is one which is of great importance—We doubt if the most economical method of making our pork is followed, if indeed it be found out, and we know that there is not enough raised in the state, or rather fattened in it, to supply the inhabitants—Much of the Ohio pork finds its way into our seaports. This, while it is not so good, is an injury to our farmers, and they must study out a method of making pork in the cheapest manner in order to compete with oily *grunters* of the forests, which are fattened on nuts and rattlesnakes.—*Maine Farmer*.

SMUT IN WHEAT.

The following extract from an article in the New York Farmer of 1831, by one of the correspondents of that paper, will show the necessity of guarding carefully against every means by which seed wheat can become infected with this disease. Results similar to this are frequently witnessed.

"A neighbor of mine, having purchased some very excellent seed wheat, the same was delivered in the farmer's bags of whom he had bought the wheat, with a promise that he, the purchaser, would return the bags immediately after the grain was sown or deposited in the drill. My neighbor complied with this request, and having drilled about half the quantity, from those bags in which he had received the wheat, he took opportunity on the following day, which day had been very wet and unfavorable for drilling the remainder, to empty those bags, in order that they might be returned. Thus was this excellent, clean, and till then unadulterated seed wheat, put into his (the purchaser's) own bags, which before had contained some very foul and diseased smutty wheat, as he together with his farm servants, acknowledged the fact. On the third day the remainder of the wheat was drilled on the same soil, and in the same field, but not from the clean bags of the seller of the seed wheat.

"Now, mark the result at harvest. The clean seed wheat, which had been emptied into the farmer's own filthy smutty bags, produced about one twentieth part of smutty ears; whereas, from the first day's drilling, not a single ear of the smutty wheat could be found."

PROLIFIC VINEYARD.

Some weeks since the beautiful vineyard of J. Dow, esq. Brooklyn, was thrown open to the gentlemen and ladies of that city, and to hundreds from New York, and not less than 1500 partook of the grapes and wine, most tastefully arranged under an extensive arbor in the centre of the vineyard. Bacchus or Cupid never witnessed a more fascinating scene, and if Bacchanalian hilarity was ever excusable, it would have been so on this occasion, the temptations were so great.

The urbanity and attention of Mr. Dow and his family, excited the admiration of the numerous visitors.

Our readers will be astonished to learn, that after the profuse consumption of grapes, Mr. Dow had still on his vines from six to seven tons of grapes, although the vines supporting them did not occupy more than about 100 square feet.—*N. Y. Gazette*.

Fruits of industry and economy.—Mr. Cooper Culver, a farmer, of the town of Arcadia, exhibited in market a few days since, 15 onions,

closely trimmed of their tops and fibrous roots, weighing 15 lbs., and measuring one peck, and received a good round price for them. Mr. C. informs us that in addition to his usual farming operations, which in fact engrosses his principal attention, he has sold during the past season, chiefly to canal boatmen, 900 bushels of garden vegetables of all sorts, for which he realized nearly the sum of \$400.

Mr. C. mentioned another fact which we think ought to be told for the benefit of such farmers as may choose to improve by it. It is, that from the information he has derived within a few years from reading agricultural publications and essays, he is enabled to *double his crops and profits.*—*From the Wayne Sentinel.*

TO HOUSEWIVES.

In this day of improvements, few have been suggested of more importance, especially to females, than the new mode of washing clothes, which has recently been introduced into this town, (Newburyport,) through the agency of two benevolent individuals now residing at a distance from us. It has been tried by quite a number of families with complete success; and those who have used it are desirous of communicating it extensively, that others may reap the same benefit which it has secured to them. It is to be used only for white clothes. It does not answer to the same purpose in case of calicoes and woollens.

1. Mixture—To five gallons of soft water, add half a gallon of lime water, a pint and a half of soft soap, and two ounces of carbonic of soda.

2. Method of Washing—Soak the clothes over night, if very dirty; at any rate, wet them thoroughly before putting them in the mixture—When the above mixture is at boiling heat, put the clothes that have been soaked or wet, merely rubbing such parts with a little soap that are usually soiled; boil them one hour—they are then to be taken out and drained, and thoroughly rinsed in warm water, then in the indigo water as usual, and they are fit for drying—The soda sub-carbonic, (be sure to get the right kind,) may be procured cheap, by purchasing it in large quantity.

Let all who feel that washing day is a day of hard work and weariness, cease to complain, until they are willing to try this safe, easy and expeditious mode of lightening their burthens.—*Essex North Register.*

Apple Jelly.—The apples are to be pared, quartered, the core completely removed, and put into a pot without water, closely covered, and placed in an oven over a fire. When pretty well stewed, the juice is to be squeezed out through a cloth, to which a little of the white of an egg is to be added, and then the sugar. Skim it previous to boiling; then reduce it to a proper consistency, and an excellent jelly will be produced.
Yankee Farmer.

FEMALE AGRICULTURISTS.

The manner in which the Buchuana females cultivate the soil is not unworthy of notice—they may be seen, perhaps fifty together, working in a line upon the same spot, and holding their pioch, or spade, in the hand, ready to strike it into the

ground on a given signal for commencing, their appearance at a distance being that of a military company under arms. Whilst at work they chaunt a kind of song as the means of animating them amidst their toils, repeating, at the same time, the names of every animal with which they are acquainted. The origin of this custom of repeating the names of animals is supposed to be found in the following practice. When a Buchuana has succeeded in obtaining game, his wife invites her neighbors to partake in the pleasure of the feast, on condition that when the period arrives for cultivating the ground, those who were guests, and had shared in her hospitality, should assist in working the soil.—*Siedman's Wanderings in South America.*

IMPORTANT STATISTICAL TABLE.—The following analysis of the occupation of the population of Great Britain is taken from "Marshall's Statistics of the British Empire."

Description.	Number of Families.		Persons.
	1821	1831	
Agricultural occupiers,	250,000	250,000	1,500,000
Agricultural laborers,	728,956	800,000	4,900,000
Mining laborers,	110,000	120,000	600,000
Millers, bakers, butchers,	160,000	180,000	900,000
Artificers, builders, &c.	200,000	230,000	650,000
Manufacturers,	340,000	400,000	2,400,000
Tailors, shoemakers, hat- ters,	150,000	180,000	1,080,000
Shopkeepers,	310,239	359,090	2,100,000
Seamen and Soldiers,	319,300	277,017	831,000
Clerical, legal, and medi- cal classes,	80,300	90,000	450,000
Disabled paupers,	100,000	110,000	110,000
Proprietors & annuitants,	192,888	316,487	1,115,398

Totals, 2,911,383 3,303,504 16,537,370

From this table it appears that the agricultural and mining classes compose 7-17ths of the whole population; the manufacturing class 5-17ths; the commercial class 2-17ths; the professional class, including the army and navy, and the non-producing class of proprietors and paupers, making up, in nearly equal proportions, the remaining 3-17ths.

THE WIDOW'S HOME.

BY MRS. ARDY.

Oh! press me not, my friends, to leave
This home endeared by former ties,
Nor deem that I could cease to grieve
Beneath the smiles of foreign skies.
Let those who fancied ills endure,
In search of rest from home depart,
No change of place can ever cure
The settled sorrows of the heart.

These scenes my fond affections claim;
They speak of calm and peaceful life;
Here, first a happy bride I came,
Here, dwelt for years a happier wife:
And though with him I loved, has fled
Each former image of delight,
Still, while his favorite haunts I tread,
I feel I have not lost him quite.

The cottages surround me here,
Where those who shared his bounty dwelt;
The church embowered in trees is near,
Where on the Sabbath day he knelt:
Oft in an open book I trace
Some passage by his taste approved;
Or greet in a familiar face
Some friend by him esteemed and loved.

Ill would the widow's mournful dress
With strange and distant scenes accord;

Ill would her heart's deep loneliness
Brook the light jest, the heedless word:
It is my cherished solace now,
In all who meet me to accost,
Those who can feel and can avow
The worth of him I loved and lost.

Think not your friendly zeal I slight,
Although your counsels I repel;
Oh! leave me, like the Shunamite,
With "my own people" still to dwell:
My thoughts are to my lost one given,
My place is by his quiet hearth,
And only for his home in heaven,
May I desert his home on earth.

The true sailor.—One of the crew of the United States frigate Potomac, who was discharged upon her arrival here, a year or two ago, went into a bank to receive his pay, when he espied upon a desk in front of him, the word "Collection." Honest Jack, supposing it to be a charity box, dropped in a five dollar note, exclaiming, "God bless the widow and fatherless."—*Boston Post.*

An Independent Elector.—"I suppose neighbor, said one elector to another, 'you'll give a plumper for Mr. —, as you did before?' 'No,' said the other. 'I don't think I shall—the beef was'n't dressed to my mind at his last election dinner.'

If you would have a clear conscience, be an honest man, and a christian—and if you would not be everlastingly damned—**PAY THE PRINTER.**

CONTENTS OF THIS NUMBER.

Acknowledgement of the loan of English agricultural works by the Rev. J. A. Robertson—Cultivation of clover—Experiments requested—a costly Tulip—Notice of an article on Seed Wheat—Description of the Glamorganshire cattle, with a portrait of a cow—Monomania in horses—Seed Wheat, various varieties and necessity for care in—Directions for cultivating Dahlias—Chapal on the preservation of roots—Inflammatory diseases of the horse—Governor Barbour on the establishment of an Agricultural professorship in the University of Virginia—Use of salting Corn—System of Cultivating Corn—Method of fattening hogs—Singular case of communicating Smut in wheat—a prolific Vineyard—Fruits of industry—Large Onions—economical method of washing clothes—Recipe for making apple jelly—occupation of the British population—the widow's home—Anecdotes—of a sailor—of an independent elector, &c.—Advertisements, prices currents, &c.

SAXONY RAMS.

The editor of the Farmer and Gardener has for sale 2 full blooded *Saxony RAMS*, and 2 $\frac{3}{4}$ blood-ed do. These sheep are of a family remarkable for their fine fleece, their wool always commanding the *best* prices in the market.

ALSO

The bull *Brilliant*, a large sized animal of the Improved Durham Short-horn breed. He is red and white; was got in England, and calved in Frederick county, Md., on the 12th May 1829. His dam was Matchless, got by Favorite, (purchased at the sale of the late R. Colling, a celebrated breeder) son of Favorite, dam by H. Allison's Gray bull, sire Orlando, that died on the passage from Liverpool, out of Rosina, from Yorkshire, that gained the highest prize premium of ten sovereigns at a Cattle show in Manchester, Eng-land. no 3

TERMS OF THIS PAPER.

1. Price five dollars per annum, payable in advance. When this is done, 50 cents worth of any kind of seeds on hand will be delivered or sent to the order of the subscriber with his receipt.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,.....	bushel.	2 50	—
CATTLE, on the hoof,.....	100lbs.	5 00	6 00
CORN, yellow,.....old, 97	bushel.	new	70a75
White,.....do 97	"	do	70a75
COTTON, Virginia,.....	pound.	18½	—
North Carolina,.....	"	—	—
Upland,.....	"	18½	20
FEATHERS,.....	pound.	37	40
FLAXSEED,.....	bushel.	1 25	1 37½
FLOUR & MEAL—Best wh. wh't fam.	barrel.	8 50	9 00
Do. do. baker's,.....	"	8 00	8 50
Do. do. Superfine,.....	"	7 50	—
SuperHow. st. in good de'd	"	7 00	—
" wagon price,.....	"	6 75	—
City Mills, extra,.....	"	7 25	7 50
Do.	"	7 00	—
Susquehanna, firm & scarce	"	6 12½	6 25
Rye,.....	"	4 62	4 75
Kiln-dried Meal, in hhds.	bhd.	19 50	20 00
do. in bbls.	bbl.	4 25	4 37½
GRASS SEEDS, red Clover,.....	bushel.	5 00	5 75
Timothy (herds of the north)	"	2 75	3 25
Orchard,.....	"	2 25	3 00
Tall meadow Oat,.....	"	2 00	2 50
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.	—	15 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	8
HOGS, on the hoof,.....	100lb.	7 00	7 50
Slaughtered,.....	"	7 00	7 50
HOPS—first sort,.....	pound.	12½	—
second,.....	"	10	—
refuse,.....	"	8	—
LIME,.....	bushel.	33	35
MUSTARD SEED, Domestic,.....	"	5 00	6 00
OATS,.....	"	42	45
PEAS, red eye,.....	bushel.	—	—
Black eye,.....	"	—	1 25
Lady,.....	"	—	—
PLASTER PARIS, in the stone,.....	ton.	—	3 50
Ground,.....	barrel.	1 25	—
PALMA CHRISTA BEAN,.....	bushel.	2 00	—
RAGS,.....	pound.	3	4
RYE,.....	bushel.	85	90
Susquehanna,.....	"	none	—
Tobacco, crop, common,.....	100 lbs	5 00	5 50
" brown and red,.....	"	5 00	7 00
" fine red,.....	"	7 00	9 00
" wrappery, suitable	"	—	—
for segars,.....	"	5 00	10 00
" yellow and red,.....	"	6 00	8 00
" good yellow,.....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality,.....	"	4 75	5 00
" ground leaf,.....	"	5 00	8 00
Virginia,.....	"	6 00	—
Rappahannock,.....	"	—	—
Kentucky,.....	"	8 00	14 00
WHEAT, white,.....	bushel.	1 50	1 55
Red,.....	"	1 45	1 50
WHISKEY, 1st pf. in bbls.	gallon.	37	37½
" in hhds.	"	33½	—
" wagon price,.....	"	30	bbls.
WAGON FREIGHTS, to Pittsburgh,	100 lbs	1 50	—
To Wheeling,.....	"	1 75	—
WOOL, Prime & Saxon Fleeces,...	pound.	55 to 68	30 to 32
Full Merino,.....	"	48 55	28 30
Three fourths Merino,.....	"	45 48	26 28
One half do.....	"	40 45	24 26
Common & one fourth Meri.	"	36 40	22 24
Pulled,.....	"	38 40	23 24

2,000 MORUS MULTICAULIS.

FOR SALE by R. Sinclair, Senr., at Clairmont Nursery, 2,000 Morus Multicaulis trees (the Chinese Mulberry.) These trees are between 7 and 8 feet high, and if planted out this fall might be fed from to advantage next spring. Persons desirous of purchasing, would do well to make early application. Their superiority for feeding silk worms is universally admitted.

nov 24

2t

BANK NTOE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,.....par	VIRGINIA.
Branch at Baltimore,....do	Farmers Bank of Virginia 2½
Other Branches,.....do	Bank of Virginia,.....do
	Branch at Fredericksburg do
MARYLAND.	Petersburg,.....do
Banks in Baltimore,....par	Norfolk,.....do
Hagerstown,.....½a	Winchester,.....do
Frederick,.....do	Lynchburg,.....do
Westminster,.....do	Danville,.....do
Farmers' Bank of Mary'd, do	Bank of the Valley,....do
Do. payable at Easton,....do	Branch at Romney,....½
Salisbury,.....5 per ct. dis.	Do. Charlestown,....do
Cumberland,.....½a	Do. Leesburg,.....do
Millington,.....do	Wheeling Banks,....1½a2
DISTRICT.	Ohio Banks, generally 2½a3
Washington, } Banks, ½.	New Jersey Banks gen. 1½a2
Georgetown, } Banks, ½.	New York City,.....½a
Alexandria, } Banks, ½.	New York State,....2½a3
PENNSYLVANIA.	Massachusetts,....2a2½
Philadelphia,.....½a	Connecticut,.....2a2½
Chambersburg,.....½a	New Hampshire,....2a2½
Gettysburg,.....do	Maine,.....2a2½
Pittsburg,.....1½a2	Rhode Island,....2a2½
York,.....½a2	North Carolina,....2½a3
Other Pennsylvania Bks. 1½a2	South Carolina,....2½a3
Delaware [under \$5]....3a4	Georgia,.....3a½
Do. [over 5].....2½a3	New Orleans,.....4
Michigan Banks,.....5a	
Canadian do.....5a	

BALTIMORE PROVISION MARKET.

	PER.	FROM	TO.
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured...	pound.	11	—
Shoulders,.....do.....	"	10	—
Middlings,.....do.....	"	8½	9
Assorted, country,.....	"	7	8
BUTTER, printed, in lbs. & half lbs.	"	18½	25
Roll,.....	"	20	—
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old...	each.	3 00	6 00
Cows, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 75	1 87
CHOP RYE,.....	"	1 68	1 75
Eggs,.....	dozen.	—	—
FISH, Shad, No. 1, Susquehanna,	barrel.	7 75	—
No. 2,.....	"	6 75	—
Herrings, salted, No. 1,.....	"	4 00	4 12½
Mackerel, No. 3,.....	"	5 75	—
Cod, salted,.....	cwt.	3 00	35 0
LARD,.....	pound.	10	10

RUFFLE OATS,

For seed, may be had at the Maryland Agricultural Repository, Light street, Baltimore, by application to Dec. 8 JAMES MOORE.

GRIST MILLS.

The subscriber has for sale at the Maryland Agricultural Repository, a few of those effective Grist Mills, so much approved of by gentlemen who have tried them. They are adapted to horse-power, and with ease will manufacture 3 bushels of grain into the most beautiful lively meal in an hour.

Dec. 8.

JAMES MOORE.

4t.

STOCK OF IMPROVED SHORT HORN DURHAMS.

THE editor of the Farmer and Gardener, Baltimore, has for sale two 7-8 and four 3-4 bred cows, 2 full bred and seven 7-8 bred bulls of the improved short-horn breed. They are all fine animals whether regard be had to their milking or fattening propensities. Their pedigrees are indisputable, all tracing to the British Herd book. They will be sold low for cash, their excellence being considered.—To any person, company, or society, who may want several, a great bargain would be given.

Letters addressed to the editor upon this subject, must be post paid.

nov 10 4t

THE SILK MANUAL.

JUST published and for sale by Sinclair & Moore and Robt. Sinclair, Jr., at the Maryland Agricultural Repository, Light near Pratt street, Baltimore, a complete Manual of the Silk Culture, in which plain instructions are laid down for the culture of the Mulberry, the feeding of the Silk worms, management of the cocoons, reeling, spinning and dyeing of the Silk. In fine, it is a perfect Manual, and comprises every department of the business. The rules are arranged in so plain and methodical a manner that every one can understand them, and by a very few hours attention become master of the business. It is clearly demonstrated in this Manual, that largely upwards of \$500 may be netted from an acre in the Culture; and it is a singular fact connected with the Mulberry as adapted to the making of Silk, that poor dry, sandy, or gravelly land suits it best, the fabric made from worms fed on leaves raised on such soil, being greatly superior in elasticity and richness of gloss to those grown on rich grounds.

Price—per copy, 50 cents.

Liberal discounts made to the trade.

nov 24

TO AGRICULTURISTS.—The analysis of Soils, Marls, mineral waters, and other productions, interesting to those engaged in Agricultural pursuits, is performed with promptness and accuracy, by

TYSON & FISHER, Chemists,
no 3 Druggists, No. 192 Market street, Baltimore.

LEON.

THE splendid bull LEON, is now at Clairmont Nursery, where he will remain a few weeks. He is a full blooded improved Durham short horn, and allowed to be one of the best bred animals in the country. He will serve Cows at \$5 each. He is milk white, with a hide as glossy and soft as satin. For his pedigree, see the advertisement, in which he is offered for sale in this day's paper.

no 3

DEVON STOCK.

THE editor of the Farmer and Gardener can at all times supply orders for Devon Cattle. This breed is so distinguished for their easy keep and docility; the richness of the milk of the cows, and for the activity and sprightliness of the oxen, that they would be admirably suited to the purposes of southern agriculturists.

Any person wishing to procure them can be supplied by addressing a letter post paid to the editor of the Farmer and Gardener.

nov 10

4t

FOR SALE.

A DURHAM Short-horn bull 15-16 blood. He is from a fine cow and got by Col. Powell's celebrated bull Monk—now two years old. Price, delivered at York, Pa., \$130.

Letters addressed to the editor post paid, will be attended to.

nov 10

2t

A GREAT BARGAIN.

A full blooded Improved Durham Short-horn bull rising five years old, and his 3 sons from 1½ to 2 years old each, 7-8 bred, has been left with the editor of the Farmer and Gardener for sale. These are first rate animals, and would be sold a bargain, if application be made promptly.

All applications by letter must be post paid.

nov 17

3t.

FOR SALE,

A HEIFER rising a year old, in calf by Leon, with a pedigree which makes her a 15-16ths bred improved Durham Short horn—she is well grown, and prettily marked.—Enquire of the editor.

no 3

RUFFIN ON CALCAREOUS MANURES, SECOND EDITION, just received at this office.

Also, A few pounds of the celebrated SKINLESS OATS, price 50 cents per lb. said to produce 80 bushels per acre.

oe 13 2t

R. SINCLAIR, jr. Seedsman, connected with this office

Printed by Sands & Neilson, N. E. corner of Charles and Market streets.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 34.

BALTIMORE, MD. DECEMBER 22, 1835.

Vol. II

THIS publication is the successor of the late
AMERICAN FARMER.

and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, DEC. 22, 1835.

ENEMIES OF THE WHEAT CROP—

A STRANGE FOE AMONG THEM.

We make the following extract from a letter we have received from a highly esteemed correspondent and subscriber at Dardenne, Missouri, by which it will be seen that many crops of wheat in that section of country last year, were nearly destroyed by the Chinch-bug, and that the Hessian fly had at its date already made its unwelcome appearance, and was unceremoniously making its ravages on the growing crops.

The letter is dated,

Dardenne, Missouri, Nov. 2d, 1835.

"The season here has been uncommonly productive, in almost all the various crops we cultivate except wheat, which was almost a total failure. That crop was very materially injured by the severe frosts of last winter; some crops entirely destroyed; and where the soil was sufficiently warm and lively to sustain the plant through the vicissitudes of the winter, the crop was in all instances much injured, and in May entirely destroyed by a disease that we call *Scab in the head*. Many of our crops that escaped both these disasters, at least in good part, were completely and effectually destroyed by the *Chinch-bug*. This insect has existed here ever since I have resided in this state (16 years) but has never before done any damage to the wheat crop worth mentioning. It has heretofore been too late making its appearance to do much damage; but the present season it commenced operations some three weeks earlier than usual, and eventually blasted the hopes of many an industrious and enterprising individual.

"Query, is there any known method of preventing the ravages of this formidable little enemy of the husbandman?

"The *Hessian fly* is now committing extensive ravages in some of my neighbors' wheat fields.—Will *fresh burnt lime* sown over the crop have any good effect in checking their operations?—They are new comers here, and I should like to place myself in an attitude of defence, if I knew how to do so. If they attack my crop I shall try the lime at all hazards."

Reply by the editor of the Farmer and Gardener.

It is to be regretted that our intelligent corres-

pondent had not been more particular in his description of the disease which he terms "*Scab in the head*," as well as of the "*Chinch-bug*," as it is almost impossible without some better guide than such terms furnish, to determine the specific character either of the disease, or insect in question. The "*Scab in the head*," we presume to be a disease in which its origin may be traced to the seed itself, on which no doubt the fungi, or egg, which ever it may be that generates the malady, has been deposited. This is the more generally received opinion, and if so the remedy is an obvious one. The cause must be destroyed in the seed, and that can be best done by submitting the grain to some severe test of ablution—to such an one as will abrupt the enemy in his retreat—less than that, will fail of answering the desired end. Whatever will effectually operate so as to produce the total destruction of the fungi, or egg, will, of course, preserve the crop from its scabious enemy. Indeed, we take it for granted, that *smut*, the *scab*, the *Hessian fly*, and others of the most annoying enemies which prey upon this grain, should be attacked in the seed. In all diseases of this character, we would submit the wheat to a *thorough washing* in pure water, and rubbing with a broom, and then, in order to soften the egg, we would soak it for at least three hours in *hot-water*, after which we would submit it to a second soaking in strong lime-water for at least twelve hours, and would, just before sowing, drain the wheat and envelope the kernels in freshly powdered caustic lime, and then sow. When the wheat is a few inches high, a top-dressing of newly slaked lime, of about 5 bushels to the acre, would be found to exercise a most salutary effect. A solution of salt and water; stale chamber ley, and linseed oil, have each and all been recommended by writers, as being proper substances to compose the *soaks* for foul seed wheat; but for ourself we should rely more on thorough washings in pure cold water, soaking in *hot water*, and subsequently in lime-water. Therefore, the greatest, if not the only security is in the use of *preventive* means, and it will not be denied that the caustic property of lime is better calculated to kill any deposit of fungi, or eggs, than almost any other substance whatever, and in addition to this good quality, it serves as a stimulant to push vegetation forward,

and thus at an early period to get the plant out of the way of those of its foes which attack it in its early state.

With respect to the *Chinch-bug*, and a remedial measure for it, we are at a loss to know what to say. Without more particular knowledge of its character and habits, it is impossible for us to determine what would be either preventive or curative. In this region of country, we have never heard of this insect as being destructive to wheat, or to any other grain; but as it has commenced its ravages in Missouri, we have no right to expect an exemption, and, therefore, feel the more solicitous to be put in possession of such specific information as will enable the agricultural community to devise some means to arrest its destructive course.

Our correspondent in speaking of the ravages of the "*Chinch-bug*," does not give us the slightest clue whereby we can establish its identity.—Does he mean the bug of that name which infests our bedsteads? Hardly—that is carnivorous in all its propensities, and we should think would make but an indifferent belligerent in a granivorous campaign. Is it the large black bug that sometimes annoy us by their visits to our sitting rooms after candle-light, and which the tradition of the nursery tells us is the nurse of the *Chinch* proper? This we can scarcely suppose; for we cannot conceive that an insect so solitary in its habits could by any ordinary means of procreation, so multiply as to prove a formidable destroyer of the wheat-fields of the husbandman. We hope however, that our correspondent will give us a minute description of this new enemy. In answer to the question, whether *fresh burnt lime* sown over the crop will have any good effect in checking the operations of the *Hessian fly*, we would observe, that we have no doubt it will be found serviceable. Wherever the lime may come in contact with the subtle enemy, we question not but that it will put him beyond the power of doing harm—there is, however, great difficulty in its reaching them in sufficient numbers to make the application one of great utility, so far as the destruction of the insect is concerned; and although we should place more reliance in attacking them in their embryo state—in the application of preventive remedies—we think our correspon-

dent acted wisely in using the lime. To the eastward, its application, when the plant is much farther advanced than his is now, the process he has adopted has been found efficacious. But whether it proves successful in killing the fly or not, we are sure it will have a good effect in nurturing the young grain and keeping it warm through the winter.

In our 80th number we published an article communicated by the Rev. Henry Colman to the *New York Farmer*, in which the propriety of the sowing of lime is sustained by the practice of Eastern agriculturists. The soundness of this practice, has however, been controverted by a writer who signs himself "*An agriculturist of Maryland*," and whose communication we subjoin with a view of letting both sides of the question be seen. While we agree with the writer that the best plan is to destroy the enemy in the egg, we must confess that we are not satisfied that sowing fresh slaked lime would not be productive of good—of much good.

[From the Chronicle.]

Mr. Editor—I have perceived a communication with the caption of "Wheat—Important discovery," originally published in the *New York Farmer*, and copied into the Baltimore papers.—As it treats on a subject of much importance to Farmers, I take the liberty of advertizing to it, and of soliciting a small space in your columns to state my observations on it. Before I do this, however, I would remark that the important discovery, which it is asserted has been made, will be of no importance to farmers in this section of country. The *New York* communication relates altogether to a fly which attacks the wheat in the head, and thus destroys the prospects of the farmer. In the South, (in Maryland and Virginia,) the fly commits its depredations previous to the month of May, and attacks the stock of the wheat at and near the roots early in the fall and spring. It is then evident that the sprinkling of lime will be of no service in this quarter.

The Fly or Insect with which we have to contend, commences its ravages, as before observed, at and near the root of the plant, and progresses upwards until near the surface of the earth, some stocks containing from six to eight of these insects. From the manner in which the insect is placed, being on the stock between the leaves, without any perforation being visible, it is certainly a correct conclusion to arrive at, that the insect is the product of an egg deposited on the wheat while in the head, and when the insect is in a "winged state," and that the egg vivifies when the wheat is sown, and becomes its destroyer.—This has been corroborated in a measure by actual experiment. By examination of wheat through a microscope, small glutinous spots have been observed, which are considered the eggs of the fly. To destroy this egg and thus prevent it from vivifying and carrying destruction into the wheat field, is an object of so much importance to farmers, that every plausible experiment should be tried.

The following simple plan has been successfully tried in Loudoun county, Va., but unfortunately not followed up as it should have been. The wheat was first brined and rolled in slacked lime (similar to rolling it in plaister) previous to its being sown. It was found to have the desired effect. The lime acting upon the egg destroyed its vitality, and thus prevented its growth into an insect when the wheat began to sprout.

This method is so simple, that it is worthy of trial by every farmer desirous of preserving his wheat from destruction; it may be some additional trouble, but when the advantages to be derived from it are considered, he should not be prevented from making it. It may be used also as a preventive of smut. Even if the views above are not correct, the rolling of the seed wheat in lime will be of great advantage, for every farmer should know that lime is the best stimulant for the growth of the plant that could be used, giving it vigour and strength from the germ.

AN AGRICULTURIST OF MARYLAND.

As the holydays will intervene before we shall have another opportunity of communing with our patrons and readers, we take this occasion to wish them a merry Christmas, and to tender them our best wishes for their health and prosperity.

We copy below from the *Lynchburg Virginian*, the address of William Radford, Esq., president of the New London Agricultural Society, and take pleasure in commending it to our readers.—Its perusal gave us great pleasure, and with very few exceptions we most cordially approve of the system of culture he so forcibly inculcates, and with all proper respect we will here mention those things which appear to us to be defective in good husbandry. Although Mr. Radford does not specify the distance of his corn-rows, we incline to the opinion, from the manner of his speaking of running his furrows, that he occupies too much space between his corn, an error consecrated by the custom of ages, but nevertheless an error—one that we hope to see corrected by such clear and comprehensive minds as we conceive that of Mr. Radford to be. We can hardly agree with him that lands which will produce clover is not adopted to any other grass; for so far as our observation goes, lands which will produce good crops of clover are in a state to produce any other grass whatever, and we think if he will try it he will find that clover, timothy, herds-grass, orchard-grass, and the tall-meadow oats, will all grow luxuriantly together in the same field on which clover will grow. With respect to the management of hogs, we believe that the farmer would find it to his interest to keep them in pens and small enclosures, where, if well fed with roots, clover, cabbages and other vegetables through the year up to fattening time, one half the number

would answer the purposes of the plantation.—Upon the whole, however, the address is one of the best we have read for many years, and has that quality so commendable in compositions intended for the practical purposes of life—brevity—to commend it to the farmer.

[From the Lynchburg Virginian.]

Address of William Radford, President of the New London Agricultural Society. Published by the unanimous request of the Society, at their 2d annual meeting in November, 1835.

GENTLEMEN OF THE SOCIETY—Having, in the last address, which the presiding officer of this Society is required to deliver at the general meeting, made some general observations on the importance of an improved system of agriculture, I will now proceed to make some remarks on those branches of it, which are applicable to the improvement and cultivation of land in this part of the country. The writer of the valuable work on farming, under the title of *Arator*, has adopted the remark of a traveller "that agriculture in Virginia is in the lowest state of degradation." Although considerable improvement has taken place since the appearance of that work, still there is too much truth in the remark; and we should be fully sensible of it, in order that we may see the necessity of a change—Let any one look at the productiveness of our lands for the first four or five years after they are cleared, and then observe the decreasing crop of each successive year, and he must be convinced of the rapid deterioration of the soil. The ordinary routine of cultivation has been, to put newly cleared land, the first and second years in tobacco, the third year in wheat, the fourth in Indian corn; and the fifth in wheat; thus drawing five successive crops without any return whatever, and without giving the soil one moment's rest. The rich alluvial lands of the west may bear this severe system of depletion, but it is not suited to the high lands of eastern Virginia. It should be the object of the farmer to preserve the land in that state of fertility, in which it is found, after producing the two first crops, which may be accomplished by a proper system of tillage. In fact, the land may be gradually improved from this state, until it will yield an average crop of wheat of from 20 to 30 bushels to the acre, which would quadruple its present value. Examples of this may be found in many farms in the State, the soil of which originally was no way superior to the lands in the neighboring country. To accomplish this desirable object, the greatest industry and the best management are necessary.

In the desultory remarks, which I shall make, I will confine myself to a few of the most important subjects connected with agriculture. The first step in the cultivation and improvement of the soil is judicious ploughing. In breaking up the land for a crop of Indian corn (which should be done as early as possible in the winter, in order to subject the soil to the action of the frost,) and in summer fallowing, the use of three horses to a plough, instead of two, is attended with great advantage. Two ploughs with three horses each, will break up nearly as much land, as three ploughs with two horses each, and will do the work incomparably better—It is attended too

with the economy of saving the labor of a hand. The objection of turning up too much clay, is satisfactorily answered by Mr. Craven—that in a short time the clay is found in its proper position, at the bottom of the soil, being probably dissolved by the rains. The turning up of too much clay at an improper season of the year, or shortly before seeding, would certainly be injudicious.—Sandy soils, which have not a clay foundation, would be injured by deep ploughing; but as the great body of land, within the range of our society, has a foundation of close red clay, the objection would not hold good, except in very few cases.—Deep ploughing in breaking up land is attended with the advantage of burying deeply the seeds of noxious weeds, and of enabling the farmer to perform the subsequent ploughing of a crop of corn with much greater ease. After preparing the land well for corn and planting the crop, considerable economy of labor may be practised in the early stages of the crop. Instead of ploughing up the whole field at every successive ploughing, which is the common mode, it is only necessary to run a single furrow next to the corn, when it is small, as the roots extended but a short distance; and it is unnecessary to plough the other part of the land as it is entirely clean. So in the last ploughing, the most judicious plan is to run one or two furrows next the corn with a small barshare plough, and to break up the remaining part afterwards.—This is attended with the advantage of not breaking the roots of the corn too late in the season.—Of all the methods of destroying land, the most successful is unquestionably ploughing it when it is wet. It is bad at any season, but particularly so in the spring and summer, when the land will become baked by the rays of the sun.

I will now speak, secondly, of the use of clover and gypsum or plaister of paris. The experience of more than fifteen years has convinced me, that the use of clover upon high land, without the aid of plaister, is of little or no advantage in the improvement of the soil. It will afford better pasturage; and perhaps prevent the land from washing. If closely grazed, however, it will not perform the office of holding the land together. Too high an estimate cannot be well formed of the use of plaister upon our lands. Although it acts most powerfully through the medium of clover, it will produce a very great effect upon the land without the aid of clover. A field which by excessive tillage becomes too much exhausted to produce clover, or any except the poorest grasses, will, if enclosed and plaistered, put up in the second year white clover, and weeds denoting a manifest amelioration of the soil. Land originally fertile, but so exhausted as barely to produce clover, by being put alternately in wheat and clover, with the free use of plaister, will in a few years be restored to its original fertility, besides producing good crops of wheat, if it be protected from the hoof. Any system of tillage which admits of much pasturing is defective. The only advantage of clover, as an improver, is, by affording a substance to rot upon the soil or to be turned in by the plough. If the clover be closely grazed, it would be just as well to put the plaister upon the naked land.

Thirdly, a judicious rotation of crops is absolutely necessary to effect a high state of improvement in the soil. To use clover and plaister to advantage, there should be fields or shifts enough

to permit the clover to seed, and fall upon the land; in order to be turned in by the plough.—To raise a crop of corn and one of wheat in succession, it is necessary that the land should lie in clover two years in succession preceding the crop of corn, with dressings of plaister each year on the clover. So that in the first advance of improvement, it is necessary to have four fields or shifts. It would require the very best management to improve the land and to make good crops with the four shift system. As the crops of wheat would be always preceded by crops of corn, the crops of wheat would be small and uncertain. It will be necessary therefore, that there should be other land reserved, to be alternated in wheat and clover, and which may occasionally be put in corn in place of one of the regular shifts, as may best suit the arrangements of the farm. It would be desirable in addition to have a standing pasture to keep the stock from the other fields early in the spring or at improper seasons. The year preceding the crop of corn, the clover should be allowed to seed, which will afford a good coat to turn in, and will make it unnecessary to sow clover seed, when the field is put in small grain, after the crop of corn.—An objection is sometimes made to the cultivation of corn, after clover, on account of the damage done to young corn by the cut worm. This objection, however, is removed, by breaking up the soil early in the winter, and subjecting the newly ploughed land to the action of the frost, which kills the worms.

Fourthly, manuring is an important branch of good husbandry. It should be the object of the farmer to carry every thing to his farm pen, that can be converted into manure, such as leaves, corn stalks, &c., which should be applied to some convenient part of the farm. The stables should be well littered and pens should be kept near them to hold the manure, which should be taken from the stables every morning when they are cleaned out.

The last subject which I shall mention is the stock necessary to be kept on a farm. It should be the object of a farmer to raise on his farm the meat necessary for the sustenance of the whole family. As hogs constitute the best food for laborers, it is necessary to pay particular attention to them. In a thickly settled neighborhood, it is the best economy for each proprietor to keep them in his own inclosures to prevent the loss of them. They should be counted regularly, and the sows and pigs should be kept apart from the other hogs, to prevent the pigs from being overlaid in bad weather. These precautions, with a moderate use of corn in the winter, and the use of clover in the summer, will be sufficient to keep them in good order. From the middle of May until frost sets in, hogs do less injury to clover than any other stock—in the winter they would destroy it by rooting it up. No stock should be put upon clover until it is in full blossom, which is generally about 15th of May. While the land is thin, as little stock as possible should be kept on the farm. When the land becomes fertilized the stock may be increased, and, if not too large, will aid in improving the soil.

Mules are more economical than horses, on account of their greater longevity, of the less food they require, and of their being less liable to be

injured by rough treatment. Of all the stock which I have attempted to raise I have been less successful in raising sheep than any other. Our lands in their present state do not appear to be well adapted to any other grass than clover, which is too long and succulent for them in the summer and affords no nourishment in the winter. It is destructive to clover to put sheep on it early in the spring. As the lands become fertile there is no part of the State that I have seen, which is better suited to the raising and improvement of cattle than the country below the Blue Ridge and bordering on it. A laudable desire seems to be manifested to improve the breed of cattle by the best crosses—Durham, Devon, and Hereford stock of the purest blood have been lately introduced by several public spirited gentlemen, which will greatly improve the product of the dairy, and I trust become profitable to the owners. May we not indulge the hope, gentlemen, that this part of the State, blest with health, and with a soil susceptible of the highest state of improvement, may become like a garden, beautiful and teeming with abundance?

MIXED CULTIVATION OF POTATOES.

We are indebted to a subscriber in Washington county, Virginia, for the subjoined communication detailing a series of experiments in the raising of potatoes and corn as a crop in common. We thank him for his favor; it is just such an essay as is most valuable to agriculturists generally. Practical results are always preferable to speculation and theory, because nothing being left to uncertainty, the husbandman is encouraged to go on and follow the example of his successful neighbor. We could wish that others would tread in the footsteps of our Washington correspondent, and give us statements of their experiments, the interests of the cultivators of the soil would be thereby greatly promoted.

To the Editor of the Farmer & Gardener:

SIR—I have noticed in the Farmer & Gardener of the 17th inst. a description of a sample of some fine potatoes presented to you, and also quotations of other samples for inspection, the weight of the heaviest of which is 5 lbs. I would state for the information of farmers, that I have been a potato raiser for many years; and, perhaps, it may be beneficial to others engaged in their culture to understand my method of raising as also the quantity I have raised for several years. In 1830, I made an experiment on a new plan in planting a part of my crop: planting corn and potatoes on the same land. I planted my corn six feet east and west, and a row of potatoes between each alternate row, and when I gathered my crop, I was so well pleased with the plan, that I have planted in the same mode ever since, and have succeeded in always producing good crops, except one year, which was a failure from a severe drought. In 1831, I had sixteen acres in corn at nine feet distance, and potatoes in the centre of the corn rows, my crop was fine: on the sixteen acres the product of potatoes was 2500 bushels, corn 25½ bushels to the acre; the

potatoes, taken altogether, the largest I have ever raised: one weighed 5 pounds 9 ounces, a number of others, 4 pounds and upwards; and, I have no doubt but there could have been from 80 to 100 bushels taken from my crop that year, that would have averaged 3 pounds. I have come to the conclusion, that one-fourth, if not more, can be raised from the same quantity of seed; they grow much better than in a patch of entire potatoes. The potato is a vegetable that grows best in a cool, moist climate, and I am of opinion the corn crop is but very little diminished in the yield, while the potato crop is much promoted in the product in planting the two crops on the same land. I believe it a great advantage, as in cultivating the crops thus, but little time is lost. I throw a furrow open and drop the potato on the plan of planting corn, and cover them with the plough, at the time the corn should be ploughed the first time. The most labor in raising the potato in this way, is in taking them up in the fall and putting them in the cellar. In 1832 my crop was valuable, it yielded 2400 bushels raised the same way. In 1833 I had but a light crop, as before stated owing to a severe drought; in 1834, my crop was 2900 bushels, the present crop was 2000. The potato is a profitable crop. I find them from experience in feeding, good food for horses cattle, hogs, and sheep. The hog is most benefitted to have them cooked and mashed, and meal mixed among them. It is an easy matter and but little expense to have a steam establishment to cook from 1 to 20 bushels at the same time. I have one that 8 bushels can be cooked in, in two hours. The plan is simple and cheap. Any tolerable handy farmer can fix one with a trifling expense. Corn in the ears, or shelled, cut straw, or any kind of food that it may be necessary to have cooked, can be prepared in the same establishment without any alterations being necessary in the machine. It may not be uninteresting to state a few circumstances as to the particulars of a part of my crop. In 1834, from 8 acres which I had in corn and potatoes, (it being a part of the land I had in the mixed crop) I realised an average of the two crops, corn and potatoes, rating the latter at 20 cents per bushel and the corn at 40 cents, of \$52 per acre, besides pumpkins and beans: of pumpkins I gathered 6 waggon loads.

I noticed the description of a large Radish in the essay on vegetables. A radish which grew in my garden this season, weighed 12 pounds with the tops and the small roots trimmed off.

W. B.

Washington County, Va.

THE DURHAM CATTLE.

A most valuable correspondent in Kentucky, gives the following as the fashionable points of Durham cattle, as insisted upon by breeders in that state. From his great experience in breeding, and excellent judgment, we have no doubt their publication will be serviceable to our readers:

"The most popular color is red, and the next roan, though I would not care much about colour if an animal suited me in other respects, and as

respects pedigree, nothing but the best would suit me. I should then want the animal as large as I could get him, to be finely formed and have fine bones; but I should prefer a small animal well formed, to a large coarse animal.

"I will here state what form and shape is most prized here—the head, horn and neck should be small; the shoulder should not rise up too abruptly from the neck on each side, nor should the animal be too thick through the points of the shoulder; the brisket should be low, broad, and project well before the fore legs; the ribs should be sufficiently barrelled to give ample capacity to the lungs, with no depression or hollow behind the shoulders, and no sharpness on the back behind the shoulders—the back should be straight and broad, the hips should be wide and on a level with the back and tail; the hip bones should be large and well rounded, and the distance from the hip to the tail should be as long as possible; the tail should be set on upon a level with the back, and should be large at top and taper down so as to be very small just above the bush; between the hips and the tail on each side the space should be well filled up, so as to give a regular rounded shape, and there should not be too much narrowness in the thighs when viewed from behind, (the fashion in Kentucky is to run back nearly square from the hips to the back part of the thighs;) the thighs should be long and fleshy down to the hock, and nearly perpendicular as the animal stands, from the root of the tail to the hock; the flanks should be deep, and the legs should be flat and the bones small and short. So far, we have been pleased with the longest bodied animals we could get.

"I do not expect perfection in any animal, but should like to get one as near it as possible. I particularly want a bull to be fine in the back just behind the shoulders, and in the ribs behind the shoulders."

WINTERING OF SHEEP.

The December number of the New York Farmer contains a very interesting communication by "Farmer C." containing a notice of the farming establishment of Mr. Henry D. Grove, of Rennselaer county, New York, from which we take pleasure in extracting that part of it which relates to the manner in which that gentleman manages his sheep during the winter. The writer says:

"I very much approve of Mr. Grove's winter management of sheep, which it may not be amiss to notice in this place; he has a large barn built on a hill side descending to the east; the upper part of the building is for keeping the hay, and the basement serves as a shed or stable, for it may be closed by doors, or they may remain open at pleasure. At one end is a large, warm and commodious cellar, where potatoes, turnips, &c. are kept for winter feeding; these are cut in a trough containing 3 or 4 bushels, with an instrument not unlike two spades, the edges crossing each other at right angles, and fitted to a handle about 4 feet long, with which a man will cut 2 or 3 bushels per minute. His racks are light, convenient, and simple, consisting of three small

poles, the one at bottom receiving the rounds of each side and one pole on each side at top, the rounds two feet long and $\frac{3}{4}$ of an inch in diameter, and the top-poles separate about two feet, then a light manger about two feet wide and one foot from the ground; the rack is set firm lengthwise in the centre of the manger, which catches all that falls from either side of the rack, and is an excellent plan to feed grain, potatoes, &c. It is the opinion of Mr. Grove, that potatoes are preferable to turnips for sheep, because they are a much more substantial food, and will never cause sheep to scour if they are regularly salted and otherwise properly fed. He also considers it highly necessary that sheep should be regularly bedded with straw. His racks and manger where his sheep are fed, are kept constantly under cover. Mr. Grove keeps a regular record of births, deaths, sales, and every circumstance relative to his flock is there exactly recorded; every sheep is numbered by marking the ear, and the number is strictly recorded, and many peculiarities highly interesting I might state."

GLEANINGS FROM EUROPEAN WORKS. THE AYRSHIRE COW.



"The origin of the Ayrshire Cow is even at the present day a matter of dispute; all that is certainly known about her is, that a century ago there was no such breed in Cunningham, or Ayrshire, or Scotland, and the present improved stock is supposed to be a cross with some foreign stock. It is said to have been the Holderness that helped to produce the improved Cunningham cattle. The cattle, from which by crosses with the native breed the present improved Ayrshire arose, were first introduced on Lord Marchmont's estates in Berwickshire. They were soon afterwards carried to the farms of the same nobleman at Somberg in Kyle.

The breed has much improved since Mr. Aiton described it, and is short in the leg, the neck a little thicker at the shoulder, but finely shaped towards the head; the horns smaller than those of the Highlanders, but clear and smooth, point-

ing forwards, and turning upwards, and tapering to a point. They are deep in the carcass, but not round and ample, and especially not so in the loins and haunches. Some, however, have suspected, and not without reason, that an attention to the shape and beauty, and an attempt to produce fat and sleeky cattle, which may be admired at the show, has a tendency to improve what is only their second point—their quality as grazing cattle,—and that at the hazard or the certainty of diminishing their value as milkers. We agree with Mr. Aiton, that the excellency of a dairy cow is estimated by the quantity and the quality of her milk. The quantity yielded by the Ayrshire cow is, considering her size, very great. Five gallons daily, for two or three months after calving, may be considered as not more than an average quantity. Three gallons daily will be given for the next three months, and one gallon and a half during the succeeding four months. The Ayrshire cow yielding 5 gallons of milk per day will afford 34 ounces=2 lb. 2 oz. of butter. Mr. Aiton says: To sum up all in one sentence, I now repeat that hundreds and thousands of the best Scotch dairy cows, when they are in their best condition and *well fed*, yield at the rate of 2000 Scotch pints of milk (1000 gallons, a Scotch pint being equal to our half gallon) in one year; that in general, from 7½ to 8 pints (3¾ to 4 gallons) of their milk will yield a pound of butter county weight, (1½ lb. averdupois;) that 55 pints (27½ gallons) of their milk will produce one stone and a half of imperial weight of full milk cheese."

Mr. Rankine, another distinguished English authority, says:

"I have seen 18 pints of milk (9 gallons) drawn from a cow in one day. I had a three year old quey that once for six weeks after calving gave 13 pints a day. These, however, are rare instances.

The fattening properties of the Ayrshire cattle we believe to be a little exaggerated. They will feed kindly and profitably, and their meat will be good. They will fatten on farms and in districts where others would not be made to thrive at all, except partly or principally supported by artificial food. They unite, perhaps, to a greater degree than any other breed, the supposed incompatible properties of yielding a great deal of milk and beef. It is, however, as Mr. Rankine well observes, on the inferior soil and the moist climate of Ayrshire and the West of Scotland, that their superiority as milkers is most remarkable. On their natural food of poor quality they give milk abundantly and long, and often until within a few days of calving; but when they are moved to richer pasture, their constitution changes, and they convert their food more into beef. In their own country a cow of a fleshy make, and which seldom proves a good milker, may be easily raised to 40 or 50 stones, and bullocks of three years old are brought to weigh from 50 to 60 stones. There is a lurking tendency about them to fatten, which good pasture will bring to light. They are not favorites with the butchers as the *fifth-quarter* does not weigh well in them. Their feet is mingled with the flesh rather than separated in the form of tallow; yet this would give a more beautiful appearance to the meat, and should enhance its price to the consumer."

[From the Farmer's Register.]

STATEMENT OF TILLAGE AND PRODUCT OF CORN, ON STAUNTON BOTTOM LAND.

I have been requested by two or three of my friends, who saw a small field of corn growing the present year on my premises, to give an account of its produce, to the public, through the columns of the Farmer's Register. I have measured and penned the corn that grew on three acres of the above mentioned field, and will confine my remarks to the three acres, which were the best in the field. I do not recollect the precise time when this corn was planted. I commenced planting about the time my neighbors did, and the field was planted several days later than my first planting; so that I conclude it was neither late nor early planting. The ground it grew on was the best Staunton river bottom, which had been cleared upwards of a century. In the year 1833 it was not cultivated, and produced a fine coat of vegetable litter which was suffered to rot (ungrazed) on the land. The succeeding year, 1834, it was cultivated in tobacco, and in 1835 planted in corn. The spring ploughing was a bed upon two shovel-plough furrows for half of the three acres, and the other half was bedded on two coulter furrows. The bedding was done by two-horse dagon ploughs, as deep as practicable. I generally prepare my flat land with three-horse ploughs, but this field had been well broken, under the previous tobacco crop, and the two-horse ploughs effected as deep ploughing as a three-horse plough, on a naked fallow. The beds were about four feet apart—rather under that distance. The corn was planted eighteen inches apart in the bed, (in the step, as it is usually termed,) and two stalks were left in a place after weeding. At weeding, the beds were thrown down by a dagon plough, and a deep coulter furrow run on either side of the young corn—as near to it as practicable. The second and last working was done by a single-horse dagon plough, the rows being too near to admit two horses in a breast. The produce of the three acres was fifty-five barrels of sound corn and several barrels of rotten, that were not measured—making upwards of eighteen barrels of sound corn to the acre.

My principal object in making the above communication is, to direct the attention of corn planters to the subject of thick planting on rich, moist land. There is much land in this vicinity as fertile as the land above mentioned, and yet, the product to the acre seldom exceeds nine or ten barrels.

The three acres were accurately measured, and, to prevent misapprehension, it may be proper to add, that ten bushels of corn in the ear were allowed to the barrel. Two rows were permitted to stand with only one stalk in the hill: these were gathered and measured with two adjoining rows with two stalks in the hill; the latter measured between a fourth and a fifth more than the former, thus conclusively determining the advantage of thick planting. The two rows with only one stalk in the hill were thinned at weeding time.

The little experience I have in farming and planting, has convinced me of the great importance of making the land we cultivate rich—"cultivate less land, and make it rich," should

be the motto of every planter, without an exception, of my acquaintance.

The corn that grew on the three acres was made at a fourth (at least) of the expense of any equal quantity of the balance of my crop—the corn in the same field with the three acres excepted. In the first place, when a small crop is cultivated, so much time may be devoted to the first preparation of the field, that but two workings are necessary. Less land and less labor is required to produce the same result. I observed in getting up the corn, (it was hauled on the stalks to the farm-pen,) that the carts were filled more rapidly than they were in the poorer fields, owing to the fact of the thick corn being more concentrated. The cutter would generally at one stroke take down two stalks; the laborers that picked up the stalks have less walking to do; the fodder and tops are also gathered with less expense.

The ratio of increase of the number of ears, as the distance between the corn stalks is diminished, is greater than one would, at first thought, suppose. For instance, if one plants his corn three feet apart every way, he has 4,840 corn hills in the acre; if he just doubles the distance and plants six feet apart, he has only 1,210 corn hills in the acre: increasing the distance by the multiplier two, diminishes the number of hills by the divisor four. So that, if the ears of corn were as large, and the same number of stalks in the hill, an acre of land that would produce five barrels when the hills were six feet apart, would produce twenty barrels when the hills were three feet apart. This fact at once shows the great loss from not planting corn as thick as the land can bear it. The advocate for thin planting would say, that "what is gained in number by thick planting, is lost in the size of the ear;" but in the two cases put above, the ear must be four times as small in the thick acre in order to reduce the quantity to an equality with the product of the thinly planted acre. Nothing is more common (when instituting a comparison between two fields of corn) than the remark, "that one field is better than the other *because* the ears of corn are larger," and, "that the corn in the small eared field was planted too thick, *because*, the ears might be larger by thin re-planting;" whereas, in nine cases out of ten, if the corn in the two fields was brought to the measuring tub, the thickly set field would be found to yield the most corn.

The size of the ears that grew on the three acres above mentioned, was so large, that I am convinced the corn was not thick enough, and have in mind to try still thicker planting next spring. The experiment will of course be confined to low moist land: as the want of moisture would as effectually check the growth of extraordinary thick corn, as the want of fertility.

I will add, in conclusion, that a good cart load of pumpkins grew on the three acres, and that Mr. John R. Elam witnessed the corn accurately measured.

G. W. READ.

Charlotte County, Nov. 5, 1835.

ON STEAMING CORN-STALKS AS A FOOD FOR CATTLE.

To the Editor of the Southern Agriculturist.

Sir,—In looking over, with much pleasure

the VIIth volume of the "*Agriculturist*," in No. 8, I discover, some remarks on the subject of ploughing in corn-stalks, for the purpose of adding to the fertility of the soil, or, in other words, of making manure of them.

Observation, reflection and reading a good deal on the subject of the corn-stalk, induced me sometime ago, to endeavor to turn this part of the refuse of the corn-crop to a better account, than suffering it to remain in the field, or to be ploughed into the soil; and I view myself as not only having succeeded in that object, but also having produced, by my mode of appropriating them, a superior mass of excellent manure, through their agency, and greatly superior to what any given quantity of them alone, could possibly produce.

After all the discussions on the subject of manures that I have seen, and there are many of them truly valuable; after all the discoveries of substances that may be applied in fertilizing the soil, with great effect; and we are certainly much indebted to science for the discovery of many singularly valuable, I believe it will be readily admitted, that we must rely on the animal world for a great and valuable portion of such matter, as will communicate fertility to a soil, of which it has been exhausted by cultivation, or which it never had.

The certain and valuable effect of animal excrement on other matter, in preparing it for acting as a fertilizer of soil, cannot be lost sight of, and that in accumulating composts, one of the happiest modes of recruiting, or preserving land, it certainly forms an admirable basis.

A variety of considerations, appear to me, to induce and urge the procurement of animal agency in forming manure, in the form of compost, and so conclusive with me are those considerations, that they leave me with my own consent, no other course than to keep all the stock I can procure and support well. I know of no part of the United States, in which good cattle will not command a fair price, either in the form of work-steers, beef-cattle, or milch-cows; of mutton, lamb, and wool, the same may be said. If this is the case, it then follows, that it will be the interest of the farmer to turn to the support of cattle, sheep, &c. every thing that can be rationally turned to that account, and to keep all that he can support well. Another argument is derived from the fact, that to enjoy a comfortable existence, it is a great insurance, to have a plentiful supply of stock, of different kinds, especially of the provision kinds.

Another consideration arises from the existence of the fact, that there are so many vegetable matters, as also animal, to be found in every section of the country, that with the aid of animal excrement, can be so readily turned into an enriching compost manure. This last consideration applies more especially to leaves, weeds, and swamp mud; and it cannot be forgotten, that one of the best vegetable dry provisions, for the supply of stock, is the most easily procured, in every part of our country, and in any desired quantity, viz. rye-hay, and it must be equally recollected, that in the production of this resource for supporting cattle, an ameliorator of the soil is employed, and one that can be followed by another crop in the same year, produced almost

without labour, equally ameliorating, and if judiciously husbanded, extremely valuable, viz. the pea.

If the advocates of ploughing in the corn-stalk, are wanting in reality to fertilize the soil, through their agency, why not let it be done in the manner best calculated to produce the greatest effect, and the most lasting results? On this theory I have acted, in appropriating the refuse of corn, to a use, and especially, with an eye to the accumulation of manure, for with me, manure is every thing.

By a perusal of one of the most valuable agricultural communications, that our annals of agriculture can produce, from the pen of the distinguished farmer, Jesse Buel, Esq. of Albany, (see his papers on the cultivation and saving on the corn crop,) it will be seen, that a crop of corn can be, and is saved by him without loss of any kind by cutting the corn down (when at a certain stage of maturity) at the ground; and at the same time, saving and curing the stalk, blade, shuck and corn, while each contains the largest portion of nutritious qualities that can be secured, consistent with a saving of the grain, and with great saving of labour, and in a way much more analogous to the process of nature, than the mode usually adopted; and that the nutritive properties of each, are saved in a much greater degree than by the usual mode, cannot even be a matter of doubt. This course is now pursued successfully throughout many parts of the United States. Our southern climate enables us, as I have sufficiently proved, from repeated trials, to succeed still better than more northerly. This mode of saving the corn-crop, as one of the steps towards the valuable appropriation of the stalk, in the way of food for stock, I have adopted and pursue; and I am so satisfied with the many good consequences growing out of it, that I could not possibly relinquish it for any other.

After my corn is housed, the stalk, blades and ears of corn, still together, I take wet weather, which forbids doing out-door work, to shuck the corn, the individual taking out the corn from the husk, also strips off the blades, if the last is needed, laying the stalks down regularly beside him, until he has an armful stripped, when he deposits them as regularly, in an adjoining room near to the cutting box, in which they are reduced to pieces of about one inch in length.

This cut stuff is placed in a steaming apparatus, perfectly simple and convenient in its construction, and economical in its cost, capable of steaming about twenty bushels at a time. After the cut stuff is sufficiently operated upon, it is taken from the apparatus and placed in a large trough. In some adjoining casks, made for the purpose, and standing near, but about a foot higher than the trough, I put warm water with as much Indian corn or rye meal, as will produce the vinous fermentation, as if going to distill. This, by a little management, I have always ready, and when it discovers a little of the acetous, I permit the liquid to pass into the trough of the cut stuff, and cover it, (which is held down by a tight moveable lid,) by means of a spigot fixed in the casks, and a light moveable trough, such as is found at distilleries, to convey water.

In the course of the night the preparation be-

comes saturated with the fermented liquor, and in the morning lifted out in baskets, taking no more of the liquor than is absorbed by the stalks, it is fed away to cows, steers, and young cattle. Any person at all acquainted with distillation, will readily see that there is not only no preparation known more agreeable to horned cattle, but equally none known to possess more fattening qualities. Every part of this preparation is eat with avidity by the cattle, and even mules, and some horses eat it with seeming gratification. Salt is moderately used. I have no doubt that if the cut stalks, &c. were put in the fermenting mass, just from the steaming apparatus, and as the last is mixed and put to work, and the whole suffered to go through the process of fermentation together, that the product would be still better, and equally as agreeable to the animal.

It will now be readily anticipated, that taking this course with the stalks, &c. of a corn crop, an acre must yield a prodigious quantity of food, and it does, for on no food need cattle thrive faster, if they get a sufficiency; it appears in the words of the old adage to "stick by the ribs." That the stalk, alone, of corn, possesses at one period, a large proportion of nutritious matter, common observation testifies. It would be perfectly irrational and contrary to all analogy to suppose, that the whole nutritive quality left the stalk on the arrival of the grain to maturity. Repeated experiment has settled that there still remains, after that period, much of the saccharine principle secreted in the dry stalk, and that the process required to bring it forward, is alone wanting to produce it, viz. fermentation. This process is carried on in the stomach of the animal; and the result is nutrition. But in passing the refuse of corn through the stomach of animals, it not only supports them, but obtains through their agency the real "leaven of fermentation," for masses of vegetable matter that cannot be employed for their support, but in which the earth around me abounds, and most of which are my pests, and the opponents of my industry, and if not destroyed, its successful destroyer, viz. weeds and leaves. The first and the last form, littering of the finest quality, cool in summer and dry and warm in winter. By employing them in this way, I add to the enjoyment of the animal that adds to mine, and by employing them in this way, through the agency of the animal, I prepare and secure an insurance for the most prolific return of the earth to my labours.

I will just add, that the stalks, &c. cut up and saturated with the fermented liquor without steaming, will be consumed with avidity by cattle, but I need no argument to convince me that the wood part of the stalk is better prepared for the digestive organs of the animal, by the process of steaming, as also the capacity of the cut stuff increased to yield nutrition.

From actual experiment, I am assured, that I can carry through our winters, well, four head of horned cattle on the stalks from an acre of good corn, permitting the cattle to go abroad when the weather admits. My standing pens are good ones, with shelters on them for bad weather. By littering with leaves, dry weeds, &c. I find myself amply paid for my corn-stalks on the arrival of the spring.

CINCINNATUS.

Woodlands, Alabama, Aug. 5, 1835.

[From the Farmer's Register.]

ON THE DIFFERENT KINDS OF COTTON.

Fairfield District, S. C. Oct. 3, 1835.

The cotton plant forms a subject of peculiar interest, both to the southern planter, and to the botanist: and every thing relating to its history and character cannot fail to excite a lively attention. The articles on this subject in your late valuable numbers, from Mr. Spadding and Mr. Croom, have been read with much pleasure, and we should be much gratified to see the investigation continued. Although these gentlemen have shed much light upon the native localities of this plant, the period and manner of its introduction into this country, and the botanical characters of the different species, yet, we apprehend, the subject is not yet thoroughly understood. Its botanical history especially—the several species, and the botanical characters of each, we shrewdly suspect are imperfectly known, and, consequently, the botanical description are very unsatisfactory. Mr. Croom has given the characters of all the species of cotton, as furnished by the Encyclopædia of Plants. But upon examination, this botanical account is found to be imperfect. To render my remarks more clear and intelligible, I will beg leave to transcribe the botanical descriptions given by Mr. Croom from the Encyclopædia. According to this, there are but four species of the cotton plant, as follows:

"1. *Gossypium herbaceum*, (greenseed cotton.) Leaves 5 lobed, 1 gland beneath: lobes round mucronate, invol. serrate, stem, smooth."*

"2. *G. hirsutum*, (Mexican and petit gulf.)—Upper leaves undivided cordate, lower 3-5 lobed, with 1 gland beneath: branches and petioles hirsute."

"3. *G. barbadense*, (sea island cotton.) Upper leaves 3 lobed; lower 5 lobed, with 3 glands beneath: stem smoothish."

"4. *G. arboreum*, (tree cotton.) Leaves 5 lobed polenate; upper 3 lobed, with 1 gland beneath, Inv. tern. Cal. with 3 glands at base."

Eight or ten years ago I substituted what is called the Mexican cotton in the place of the green seed: and for the last three or four years I have purchased annually, as many bushels of what is sold in the Charleston market as petit gulf seed, as would furnish seed sufficient for the succeeding crop, so that my whole crop now consists of what we consider the petit gulf kind, with perhaps, some remaining plants of the kind introduced some years ago under the name of Mexican. Upon careful examination, of my own crop, and those of many other gentlemen who plant the petit gulf seed, I find the botanical characters to be as follows.

Upper leaves 5 lobed; lobes acute mucronate: lower 3 lobed, mucronate, 0 glands, stem, branches, petioles and peduncles hirsute. Perianth 3 leaved, gashed-toothed.

Now it is manifest, that this description does not apply to either of the species above described by Mr. Croom. It does not apply to the *G. hirsutum* (Mexican or petit gulf,) because, although it is hirsute, yet the upper leaves are not undivided cordate, but 5 lobed acuminate mucro-

nate, whilst the lower leaves are 3 lobed, and not 3-5 lobed with 1 gland beneath.

It is equally manifest, that the description of what we plant as petit gulf, does not apply to either of the other three species. Is the kind, then, which we plant as petit gulf cotton, a fifth species? Or is it a hybrid? Be this as it may, we have found it so superior in point of productiveness, to the green seed, and it has so entirely superseded the latter, that I have not been able to find a single plant of the green seed kind growing in the neighborhood, with which to make a comparison as to its botanical characters.

That the plant which we cultivate as the Mexican, and that which we cultivate as the petit gulf is one and the same species, is manifest enough. The only difference we can detect is in the bearing and productiveness. Owing, perhaps, to its being a variety, or perhaps to the seed being fresh from the Mississippi, the petit gulf kind is earlier and more productive, at any rate for two or three years, than any kind we have every yet planted.

Upon the whole, what are we to make of the description of the *G. hirsutum*, given by Mr. C. as the Mexican or petit gulf, from the Encyclopædia of Plants? We plant no cotton of this description, I think, in this state. Of course, the question arises, have we been deceived in the seed imported as the petit gulf seed—or have the botanists been mistaken in their description of it? A further examination of the subject is worthy of the attention of botanists; and I would hope ere long to see the several species of cotton settled with as much precision as those of any other plant. This, I am sure you will perceive, is not a mere idle curiosity. The practical utility to the planter of being able to determine the species with certainty by a view of the growing plant, will strike you at once, as very important in several respects. And the botanist who may reduce the subject to accuracy and certainty will not only render a valuable contribution to the science of botany, but he will confer an important favor upon cotton planters and deserve well of his country.

JAMES DAVIS.

NORTON'S WINE.

A gentleman of this city to whom a few bottles of *Norton's Wine* had been sent, presented us on Saturday with a bottle of it. It was made by Mr. D. N. Norton, of Magnolia near Richmond, Va., in 1833, from a variety of Grape produced by that gentleman from the seed, and favorably known as *Norton's Seedling*. It is without any addition of sugar or spirit of any kind, and is a most luscious article; its flavor is high, racy, and decidedly pleasant, though not less peculiar, forming in itself a very agreeable combination of those which distinguish the Burgundy, Malmsey Madeira, and Malaga wines.—The color is deep, and presents to the eye much of the appearance of Port Wine, though it is entirely free from its astringent quality. It is not our purpose to say, that this wine is as good or better than any imported; but we do, in all candor affirm, that we consider it a better article than one half of the newfangled liquors which we receive from Eu-

rope bearing the name of wine. As a light table drink we have not tasted any thing which, with the addition of water, makes a more delicious and exhilarating beverage.

The vine from which this liquor was made, is, we are assured, a great bearer, is perfectly hardy, having withstood the intense cold of last winter "unblemished," and bore a heavy crop of grapes the past season; thus demonstrating its capacity to overcome one of the most formidable objections to our engaging extensively in the business of vine-growers.

We think Mr. Norton deserves great credit for the intelligence and perseverance with which he has prosecuted the culture of the vine, and we sincerely hope his patriotic exertions will be met in a spirit commensurate with the benefits he has conferred upon the interests of agriculture, both individually and nationally; and if it would not be imposing too much upon his good nature, we would ask him to favor us with an account of the method by which he made so excellent a wine.

DESTRUCTIVE FIRES.

A fire occurred at Cheraw, South Carolina, on the afternoon of Wednesday, the 8th inst. which destroyed from 175,000 to 200,000 dollars' worth of property; of which but 75,000 dollars were insured. So heavy a loss upon a small town like this, is, indeed, a heavy infliction.

On the night of Tuesday, the 15th instant, a most awful and appalling fire occurred at New York, sweeping every thing in its way until it had laid in ruins 674 buildings, besides immense quantities of merchandize, household furniture, and other property. The following brief statement from the New York Courier will give our distant readers a pretty correct idea of the amount of destruction. The loss has been variously stated at from 15 to 30 millions of dollars, we sincerely hope the first amount may prove the most correct. We view this not as a sectional loss, but as one of national import, for every American was necessarily proud of the great commercial emporium of his country.

From the Courier and Enquirer of Friday morning.

END OF THE FIRE.

The following will be found a tolerable accurate statement of the number of Houses and Stores now levelled with the ground.

26 on Water street.
79 on Pearl street.
3 on South street.
76 on Water street.
80 on Front street.
16 on Hanover street.
62 on Exchange Place.
31 on Exchange street.
44 on William street.
33 on Old Slip.
16 on Coenties Slip.
60 on Stone street.
3 on Hanover square.
23 on Beaver street.
20 on Gouverneur's lane.
10 on Jones' lane.
20 on Cuyler's alley.
38 on Mill street.

674

Six hundred and seventy-four tenements. By far the greater part in the occupancy of our largest shipping and wholesale dry goods merchants and filled with the richest products of every portion of the

*Mr. Eaton in his Manual of Botany, describes the *G. herbaceum* as a biennial. Certainly not so in this country.

Globe. How estimate the immense loss sustained or the fatal consequences to the general prosperity?

Of the Merchants' Exchange nothing but its marble walls remain standing.

Three or four vessels lying at the wharves on South street were slightly injured in their yards and rigging. They were all hauled out into the river as soon as practicable.

We believe the progress of the destructive element is now nearly stayed.

A detachment of marines from the Navy Yard, under Lieutenant Reynolds, and of sailors, under Captain Mix of the Navy, arrived on the spot at two o'clock in the morning. They rendered most valuable service. The gunpowder brought from the magazine at Red Hook was partly under their charge.

As we cannot state the loss of life with precision, we abstain from giving surmises. The cold during the whole time was excessive, thermometer at Zero.

It may be easily supposed that this greatly paralyzed the exertions of the Firemen. We saw one who sank under its effects and who was with difficulty resuscitated.

Two companies, with their engines, arrived here from Newark, and rendered very material assistance.

The passengers in the steam boat coming down the river, saw the flames from the highlands, forty-five miles distant, and such was the violence of the gale, during the prevalence of the fire, that burning embers were carried across the East river to Brooklyn, and set fire to the roof of a house there, which was, however, speedily extinguished.

Last night, strong bodies of Cavalry and volunteer Infantry were patrolling the streets near the fire and preserved perfect order, and we trust prevented any further serious depredations.

Whatever can be done constitutionally to relieve the sufferers, in both cases, should be done, and that quickly.

There have been advices from London to the 31st October, but nothing from France. The affairs of the queen of Spain appear to be improving under the ministry of M. Mendezabel, the whole of the Junta having sent in their adhesion.

CONTENTS OF THIS NUMBER

Enemies of the wheat crop—a strange foe among them—Christmas holidays—Mr. Radford's address—mixed cultivation of Potatoes—Points of the Durham cattle as preferred in Kentucky—wintering of sheep—portrait and description of the Ayrshire cow—tillage and product of corn on Staunton bottom land, by G. W. Read—value of steaming corn stalks for food for cattle—Norton's wine—Destructive fires at Cheraw and New York—Foreign advices—essay on the different kinds of cotton—prices current, bank note table, advertisements, &c.

THE SILK MANUAL.

JUST published and for sale by Sinclair & Moore and Robt. Sinclair, Jr., at the Maryland Agricultural Repository, Light near Pratt street, Baltimore, a complete Manual of the Silk Culture, in which plain instructions are laid down for the culture of the Mulberry, the feeding of the Silk worms, management of the cocoons, reeling, spinning and dyeing of the Silk. In fine, it is a perfect Manual, and comprises every department of the business. The rules are arranged in so plain and methodical a manner that every one can understand them, and by a very few hours attention become master of the business. It is clearly demonstrated in this Manual, that largely upwards of \$500 may be netted from an acre in the Culture; and it is a singular fact connected with the Mulberry as adapted to the making of Silk, that poor dry, sandy, or gravelly land suits it best, the fabric made from worms fed on leaves raised on such soil, being greatly superior in elasticity and richness of gloss to those grown on rich grounds.

Price—per copy, 50 cents.

Liberal discounts made to the trade.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM.	TO.
BEANS, white field,	bushel.	2 50	—
CATTLE, on the hoof,	100lbs.	5 00	6 00
CORN, yellow,	bushel.	new	75a80
White,	"	do	75a80
COTTON, Virginia,	pound.	18½	—
North Carolina,	"	—	—
Upland,	"	18½	20
FEATHERS,	pound.	37	40
FLAXSEED,	bushel.	1 25	1 37½
FLOUR & MEAL—Best wh. wh't fam.	barrel.	8 00	8 50
Do. do. baker's,	"	7 50	8 00
Do. do. Superfine,	"	7 25	—
SuperHow. st. in good de'd	"	7 00	—
do. " wagon price,	"	6 75	—
City Mills, extra,	"	6 75	7 00
Do. "	"	6 75	6 87
Susquehanna, firm & scarce	"	6 75	6 87
Rye,	"	5 00	5 25
Kiln-dried Meal, in hhds.	hhd.	19 50	20 00
do. in bbls.	bbl.	4 37	4 50
GRASS SEEDS, red Clover,	bushel.	5 00	5 75
Timothy (herds of the north)	"	2 75	3 25
Orchard,	"	2 25	3 00
Tall meadow Oat,	"	2 00	2 50
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.	—	15 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
Hogs, on the hoof,	100lb.	7 00	7 50
Slaughtered,	"	7 00	7 50
HOPS—first sort,	pound.	12½	—
second,	"	10	—
refuse,	"	8	—
LIME,	bushel.	33	35
MUSTARD SEED, Domestic,	"	5 00	6 00
OATS,	"	42	45
PEAS, red eye,	bushel.	—	—
Black eye,	"	—	1 25
Lady,	"	—	—
PLASTER PARIS, in the stone,	ton.	—	3 50
Ground,	barrel.	1 25	—
PALMA CHRISTA BEAN,	bushel.	2 00	—
RAGS,	pound.	3	4
RYE,	bushel.	88	90
Susquehanna,	"	none	—
TOBACCO, crop, common,	100 lbs	5 00	5 50
" brown and red,	"	5 00	7 00
" fine red,	"	7 00	9 00
" wrappery, suitable	"	—	—
for segars,	"	5 00	10 00
" yellow and red,	"	6 00	8 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality,	"	4 75	5 00
" ground leaf,	"	5 00	8 00
Virginia,	"	6 00	—
Rappahannock,	"	—	—
Kentucky,	"	8 00	14 00
WHEAT, white,	bushel.	1 40	1 45
Red,	"	1 35	1 40
WHISKEY, 1st pf. in bbls.	gallon.	37	37½
" in hhds.	"	33½	—
" wagon price,	"	30	bbls.
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 50	—
To Wheeling,	"	1 75	—
WOOL, Prime & Saxon Fleeces, ...	pound.	55 to 63	30 to 32
Full Merino,	"	48	55 28 30
Three fourths Merino,	"	45	48 26 28
One half do.	"	40	45 24 26
Common & one fourth Meri.	"	36	40 22 24
Pulled,	"	38	40 22 24

2,000 MORUS MULTICAULIS.

FOR SALE by R. Sinclair, Senr., at Clairmont Nursery, 2,000 Morus Multicaulis trees (the Chinese Mulberry.) These trees are between 7 and 8 feet high, and if planted out this fall might be fed from to advantage next spring. Persons desirous of purchasing, would do well to make early application. Their superiority for feeding silk worms is universally admitted.

nov 24

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BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,	par	VIRGINIA.
Branch at Baltimore,	do	Farmers Bank of Virginia,
Other Branches,	do	Bank of Virginia,
		Branch at Fredericksburg,
MARYLAND.		Petersburg,
Banks in Baltimore,	par	Norfolk,
Hagerstown,	do	Winchester,
Frederick,	do	Lynchburg,
Westminster,	do	Danville,
Farmers' Bank of Mary'd,	do	Bank of the Valley,
Do, payable at Easton,	do	Branch at Romney,
Salisbury,	5 per ct. dis.	Do. Charlestown,
Cumberland,	do	Do. Leesburg,
Millington,	do	
DISTRICT.		Wheeling Banks,
Washington,		Ohio Banks, generally
Georgetown,	Banks, ½.	New Jersey Banks gen.
Alexandria,		New York City,
PENNSYLVANIA.		New York State,
Philadelphia,	do	Massachusetts,
Chambersburg,	do	Connecticut,
Gettysburg,	do	New Hampshire,
Pittsburg,	do	Maine,
York,	do	Rhode Island,
Other Pennsylvania Bks.	do	South Carolina,
Delaware [under \$5],	do	Georgia,
Do. [over \$5],	do	New Orleans,
Michigan Banks,	do	
Canadian do.	do	

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,	barrel.	—	—
BACON, hams, new, Balt. cured...	pound.	11	—
Shoulders,	"	10	—
Middlings,	"	8½	9
Assorted, country,	"	7	8
BUTTER, printed, in lbs. & half lbs.	"	18½	25
Roll,	"	20	—
CIDER,	barrel.	—	—
CALVES, three to six weeks old...	each.	3 00	6 00
Cows, new milch,	"	17 00	30 00
Dry,	"	8 00	12 00
CORN MEAL, for family use,	100lbs.	1 75	1 87
CHOP RYE,	"	1 75	1 87
EGGS,	dozen.	—	—
FISH, Shad, No. 1, Susquehanna, ..	barrel.	7 75	—
No. 2,	"	6 75	—
Herrings, salted, No. 1,	"	4 00	4 12½
Mackerel, No. 3,	"	5 75	—
Cod, salted,	cwt.	3 00	35 0
LARD,	pound.	10	10

RUFFLE OATS,

For seed, may be had at the Maryland Agricultural Repository, Light street, Baltimore, by application to Dec. 8 JAMES MOORE.

GRIST MILLS.

The subscriber has for sale at the Maryland Agricultural Repository, a few of those effective Grist Mills, so much approved of by gentlemen who have tried them. They are adapted to horse-power, and with ease will manufacture 3 bushels of grain into the most beautiful lively meal in an hour. JAMES MOORE.

Dec. 8.

4t.

STOCK OF IMPROVED SHORT HORN DURHAM.

THE editor of the Farmer and Gardener, Baltimore, has for sale two 7-8 and four 3-4 bred cows, 2 full bred and seven 7-8 bred bulls of the improved short-horn breed. They are all fine animals whether regard be had to their milking or fattening propensities. Their pedigrees are indisputable, all tracing to the British Herd book. They will be sold low for cash, their excellence being considered.—To any person, company, or society, who may want several, a great bargain would be given.

Letters addressed to the editor upon this subject, must be post paid.

nov 10 4t

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. F. ROBERTS.

No. 35.

BALTIMORE, MD. DECEMBER 29, 1835.

Vol. II

—THIS publication is the *successor* of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, DEC. 29, 1835.

THE DEVONSHIRE CATTLE.

The article which we give to-day under the above head, is one of great interest, and we hope will be attentively read by every one engaged in the raising of stock, and especially by those who use oxen for the purposes of the draught. To gentlemen of the south, where natural pastures are indifferent, and the artificial grasses not generally cultivated, the possession of such generous, active, and easily fed beasts, would certainly prove a most desirable acquisition. The historical as well as descriptive parts of this notice, are peculiarly attractive, and we again commend it to attention. The portrait of the *Devon Cow*, is faithful to the very life, and is from the graver of that excellent artist, Mr. Horton.

Rohan Potatoes.—A potato with this name is said to have been originated in England from seed which weigh from 10 to 15 lbs. each. They are said to be of good flavor and very farinaceous. They derive their name from prince Charles de Rohan, of Sweden, who has become patron to this new variety.

SWEET POTATOES.

In Louisiana the planters raise their sweet potatoes thus. They make a bed of fresh stable manure, as you would a hot bed for forcing other vegetables—on this bed they lay their seed potatoes, without cutting, about 8 or 10 inches apart, and cover them with well rotted manure, or compost made very fine, to the depth of six inches. The potato will soon sprout and come up. When two or three inches high, they draw the sprouts, by running the finger down to the potato, and breaking them off there. These sprouts they transplant in a hill with a dibble, and if the earth is not sufficiently wet, water the plants two or three times. A gill of water to a plant will be sufficient for a watering, and in five or six days the plants will

have taken root. Care must be taken to insert the plants as deep in the hill as they were in the bed when drawn.

By this mode of bedding and transplanting, larger potatoes and more abundant crops are obtained. A bushel thus bedded will plant five acres of ground.

SILK COMPANY OF QUEEN ANNE COUNTY.

We are gratified to learn that a number of gentlemen in Queen Anne County, on the eastern shore of this state, have organized themselves into a company with a capital of \$5,000, to be increased as the interests of the association may require it, for the purpose of carrying on the Silk Culture. The company is now in treaty for the purchase of a suitable farm, and are taking the necessary steps to procure Mulberry trees of sufficient age and size to enable them to feed worms the ensuing spring. To say that we are gratified at this movement is but to convey a faint and imperfect idea of those feelings with which we are impressed. We view it as the beginning of a new era in the affairs of Maryland—as the dawning of the day-star of her regeneration—as the corner stone of the foundation on which is to be erected a beautiful superstructure of individual prosperity and wealth—as the beacon light that is to conduct our loved state to an important position in the arch of the confederacy. Such being the light in which we estimate this patriotic effort of the gentlemen of Queen Anne, we would be indulged in the hope, that their laudable example may excite the emulation of the citizens of every other county, not only on that shore, and in our state, but of those of every county in the country. Possessing as Maryland does, in a pre-eminent degree, all the physical capacities for conducting the silk culture upon an enlarged and profitable footing, nothing has been wanting to give to the productions of her soil a value beyond all ordinary calculation, but a proper direction to be given to the industry, enterprise and skill, of her people,—and that, we sincerely hope and believe has been reserved for the citizens of Queen Anne, whose gallant lead in the promotion of this lucrative branch of agricultural industry, will entitle them to the gratitude and respect of their countrymen.

We honestly believe that without *materially interfering* with the present pursuits of farmers in this state, there is not a county in it that could not increase the amount in value of its productions, by entering spiritedly into the raising of mulberries, at least half a million of dollars per annum; and there are some of them that might greatly exceed that sum. We will not be thought sanguine upon this point, when it is stated upon the authority of the Hon. Judge Spencer, that *Windham County* in Connecticut, has produced five tons of silk a year, worth, at the rate of \$4 per pound, \$500,000; and if in that bleak region of rocks and cold, such brilliant results have occurred, certainly in our happy and congenial land of sun and soil, much better ones may be realized. When we speak of suitable soil, we wish it to be borne in mind, that, when the trees have once got a start, poor, sandy, or gravelly dry land, makes the best silk, imparting to its texture a glossiness, and to its thread an elasticity, which the foliage of rich, moist, loamy land, has not the power of conferring.

THE WAY TO ACCUMULATE MANURE.

There are perhaps no people in the world who so well understand the art of accumulating manure, as those farmers of Holland and Flanders, who are engaged extensively in the business of grazing and dairymen. Their farms are perfect patterns of neatness. Every thing is managed so as to economize time and money, keep down noxious vegetation, promote the growth of crops, and make the greatest possible quantity and best quality of manure.

This is as much the result of necessity as of the force of habit; for from the great number of individuals a small portion of land is made to support, every foot in cultivation is taxed with the maximum product of which it is susceptible of being made to yield. There, it is not a question, who shall have the largest fields in culture? no such senseless ambition enters into the farmer's brain; the only spirit of rivalry that prevails, is, who can make the soil produce the most? They know that where a population is dense to excess, the means of multiplying the productions of the earth must be not only studied as a science, but as a practical one; and they know, too, that ju-

delicious manuring lies at the very foundation of good farming—that any system of husbandry which does not contemplate the providing full supplies of alimentary and calcareous manures, must in the natural course of things be a defective one, and hence the sedulousness with which they husband every species of offal, vegetable, and other materiel, that can be converted into nutrition for plants. As but few of our farmers understand the value of exerting a just economy in this particular branch of agriculture, or if they do, do not act in accordance with the dictates of their knowledge, we will sketch from *Lawrence*, the outline of the mode pursued by the very notable farmers to whom we have before alluded.

“They make at the back of their stables and cattle sheds, a large round hole of about 3 feet deep, and capacious enough to contain one month’s dung: the sides and bottoms of this are built water tight of clinker bricks, or stones. The floors of their cattle-sheds are also made hard, dry, and water-tight, with water-tight drains to lead to another pit made in the same manner, also at the back of the shed at a few yards from, and of a similar size to, the dung-pit; so that all the liquid manure necessarily runs from the stalls into the cess-pool or tank;—to this place also drains are made from the privies, and from the sinks in the kitchen and wash-house; so that every drop of soap suds, water and all dirty and refuse water finds its way to the cess-pool; which is never allowed to run over.

The fields of corn stubble, and the second year’s grass land, whether of clover, ray grass, or saintfoal are carefully pared into thin clods: these clods, containing a proportion of the roots of the plants which have before been harvested from them, and much garden mould become useful auxiliaries to the straw, bean haulm, and any other waste produce, capable of being dried for bedding, and spares the use of those materials, which if solely applied would require half the land of the farm to supply. This refuse, together with the parings of their lanes, the edges of their walks, and sides of their hedges, are dried and then carried to their barns, where they are piled in a kind of stack, and portions of it are carried daily as it may be wanted for bedding into the cattle sheds.

The bedding of the cattle is made with fresh clods every morning and evening, that part which has been under the head of the cow is, every morning, thrown under her forefeet, and that which was under her forefeet, is thrown into its place, and fresh clods, about one hundred and fifty pounds weight, is added to the bedding, and then straw, or other dry vegetable produce is strewed over that;—the same is done also every evening. The sheep and pigs are only supplied with fresh bedding once a day. The bedding lies under them seven days and seven nights, when the stalls are cleared out, and the dung conveyed into the dung-pit, at the back of the cattle sheds, where it lies until it has had the four weeks dung thrown into it.

This mass is thus composed of portions of manure which have laid in the dung-pit four

weeks, and upon which all the ashes and scrapings of the house and premises are thrown daily. The reservoir, or tank, into which all the drainings of the stable, &c. are conveyed, and which is necessarily contiguous, is, every other day, if not full enough, made so with water, and after being stirred up, is thrown with a scoop over the heap of dung. Now as this heap contains four weeks dung, fourteen wettings with such rich fermenting liquids more than doubles the whole heap for agricultural purposes.

At the end of the fourth week, the dung hole, or dung pit, is emptied, by which means the pit’s contents is again turned over, and its most rotten parts brought to the top. It is now formed into a heap from three to five feet high, and carefully covered with sods; by this covering, the heat and goodness of the dung is prevented from evaporating, and the rain water is kept from penetrating into it, which would otherwise check its fermentation. When the heap has lain and fermented during two or three months, it is carried into the fields to be manured with it, and the sods which covered it are thrown into the bottom of the dung pit, where they lay and become excellent manure.”

WEEVIL IN WHEAT.

The editor of the *Maine Farmer*, in one of his papers in November, states that a friend in Dover, Penobscot county, of that state, informed him that the Weevil had already made its appearance there. He had examined a few heads of wheat which had started up in a patch of peas and oats, and found that from 3 to 6 kernels in each head contained a maggot which had eaten out all the flour. The maggot was brownish and about half as long as the kernel, and what was remarkable, all of these kernels had sprouted, while the other kernels had not. The person who tends the mill in that place thinks that at present, about one bushel in thirty is destroyed by the insect. In the town of Albion, there have been several cases of this kind. In Andover and its vicinity, (Oxford county) wheat on land which had been ploughed without being burnt, has been much injured by this insect, while wheat upon burnt land escaped. In England the custom prevailed at one time of burning lands intended to be fallowed for wheat, with the view of destroying, in their embryo state, those insects which preyed upon the grain, the belief being then prevalent that the deposit was made in the soil; but if the weevil be generated there, why does he delay his appearance until the grain is secured and stored away? That paring and burning very foul lands would be an efficient cleanser, and that the alkaline principle thereby created would exercise a salutary effect, to a limited extent, we have not the slightest doubt, and we believe also, that all deposits of noxious seeds, eggs, and fungi, which might be submitted to the action of the fire would

be destroyed. But then, as the weevil is one of those insects whose depredations commence after the husbandman has gathered his grain into his garner, other means are necessary than paring and burning, however promotive they may be of exciting a healthful condition in the soil. The means recommended, are winnowing the grain with a sieve, salting the straw in the stack, and sprinkling powdered lime through the heaps of wheat in the granary. Well ventilated bins for the free admission of air through the grain, so as to keep down that degree of heat necessary to the hatching of the eggs of the insect, has been, also, recommended, as well as drying the grain in a stove or oven heated to 80 or 90 degrees of *M. de Reaumer’s* thermometer. The latter remedy would doubtless prove effectual, but would be attended with great inconvenience, and we question whether to most farmers it would not prove wholly impracticable. Where the grain is limed, it is necessary to separate it subsequently from the lime.

OLD METHOD OF MEASURING CORN.

The following method was communicated to the *Southern Agriculturist*, by a gentleman of Charleston. It was found among a parcel of old papers, which prove that it is at least forty or fifty years of age, and that no very great improvement has taken place in the mode of ascertaining the number of bushels in any given quantity of corn.

Measurement of a binn of corn in a corn-house, in the ear, giving the nett bushels, supposing it threshed out:

Binn—14 feet in length
Multiply 17 feet wide

98

14

238

7 feet depth

1666

Multiply 4 cubic

Div. cub. 5)6664

$\frac{1}{2}$)1333 for the cob

Nett, 666 bushels.

CARNIVEROUS.—A paper in Indiana, speaking of a diminutive neighbour of the quill, says, he “can swallow a dozen of him in the morning and not know he had been to breakfast!” Most horrid!—*Wilmington, (Ohio) Democrat.*

[The aforesaid Indiana Editor would be an admirable fellow to extirpate a field of grub-worms.]

GLEANINGS FROM EUROPEAN WORKS.

CATTLE OF GREAT BRITAIN.

We copy from the Library of Useful Knowledge, the following description of the Devonshire breed of Cattle, and in order that our readers may be the better able to judge of the beauty of these generous animals, we have incurred the expense of a cut representing the favorite cow of Mr. *Western*, a most distinguished English breeder. We have selected her model, because of her intrinsic excellence, and of the great resemblance which she bears to an aged cow, about sixteen years old, owned by Mr. *Richard Caton*, of Baltimore, now being fattened at his fine estate at Brookland Meadows, about nine miles from this city, where he also has between 40 and 50 others in the greatest purity. The original stock was presented to his accomplished daughter, the *Marchioness of Wellesley*, by that patron of agriculture, Mr. *Coke*, the great Commoner of England, and was, of course, of the most approved kind.

THE DEVONSHIRES.

The north of Devon has been long celebrated for a breed of cattle beautiful in the highest degree, and in activity at work and aptitude to fatten unrivalled. The native country of the North Devons, and where they are found in the greatest purity, extends from the river Taw westward, skirting along the British Channel; the breed becoming more mixed, and at length comparatively lost before we arrive at the Parrett. Inland it extends by Barnstaple, South Molton, and Chumleigh, as far as Tiverton, and thence to Wellington, where again the breed becomes unfrequent, or is mixed before we reach Taunton. More eastward the Somersets and the Welsh mingle with it or supersede it. To the south there prevails a large variety, a cross probably of the North Devon with the Somerset; and on the west the Cornish cattle are found, or contaminate the breed. The true and somewhat prejudiced Devonshire man confines them within a narrower district, and will scarcely allow them to be found with any degree of purity beyond the boundaries of his native county. From Portlock to Biddeford, and a little to the north and on the sound, is, in his mind, the peculiar and only residence of the North Devon.

From the earliest records the breed has there remained the same; or if not quite as perfect as at the present moment, yet altered in no essential point until within the last thirty years. That is not a little surprising when it is remembered that a considerable part of this district is not a breeding country, and that even a proportion, and that not a small one, of Devonshire cattle, are bred out of the country. On the borders of Somerset and Dorset, and partly in both, extending southward from Crewkerne, the country assumes the form of an extensive valley, and principally supplies the Exeter market with calves.—Those that are dropped in February, and March, are kept until May, and then sold to the Drovers, who convey them to Exeter. They are there

purchased by the Devonshire farmers, who keep them for two or three years, when they are sold to the Somersetshire graziers, who fatten them for the London market, so that a portion of the North Devon, and of the very finest of the breed, come from Somerset and Dorset.

The truth of the matter is, that the Devonshire farmers, were, until nearly the close of the last century, not at all conscious that they possessed any thing superior to other breeds; but like agriculturists every where else, they bought and bred without care or selection. It is only within the last fifty or sixty years that any systematic efforts have been made to improve the breeds of cattle in any part of the kingdom; and, we must acknowledge, that the Devonshire men, with all their advantages, and with such good ground to work upon, were not the first to stir, and for some time, were not the most zealous when they were roused to exertion. They are indebted to the nature of their soil and climate for the beautiful specimens which they possess of the native breed of our Inland, and they have retained this breed almost in spite of themselves.

A spirit of emulation was at length kindled, and even the North Devons have been materially improved, and brought to such a degree of perfection, that take them for all in all, they would suffer from intermixture with any other breed.

Before, however, we attempt to describe the peculiarities of this or any other breed, it may be proper to give a short sketch of the proper form and shape of cattle. Whatever be the breed, there are certain conformations which are indispensable to the thriving and valuable ox or cow. When we have a clear idea of these, we shall be able more easily to form an accurate judgment of the breeds of the different counties as they pass before us. If there is one part of the frame, the form of which more than any other renders the animal valuable, it is the chest. There must be room enough for the heart to beat, and the lungs to play, or sufficient blood for the purposes of nutriment and of strength, will not be circulated; nor will it thoroughly undergo that vital change, which is essential to the proper discharge of every function. We look, therefore, first of all to the wide and deep girth about the heart and lungs. We must have both: the proportion in which the one or the other may preponderate, will depend on the service they require from the animal: we can excuse a slight degree of fatness on the sides; for he will be lighter in the forehead and more active; but the grazier must have width as well as depth. And not only about the heart and lungs, but over the whole of the ribs must we have both length and roundness; the *hooped* as well as the deep barrel is essential; there must be room for the capacious paunch, room for the materials from which the blood is to be provided. The beast should also be ribbed home; there should be little space between the ribs and the hips. This seems to be indispensable in the ox, as it regards a good healthy constitution, and a propensity to fatten; but a largeness and drooping of the belly is excusable in the cow, or rather, notwithstanding it diminishes the beauty of the animal, it leaves room for the udder; and if it is also accompanied by swelling

milk veins it generally indicates her value in the dairy. This roundness and depth of barrel, however, is most advantageous in proportion as it is found behind the point of the elbow, more than between the shoulders and legs; or low down between the legs, rather than upwards towards the withers: for it diminishes the heaviness before, and the comparative bulk of the coarser parts of the animal, which is always a very great consideration. The *loins* should be wide: of this there can be no doubt; for they are the prime parts; they should seem to extend far along the back, and although the belly should not hang down, the flanks should be round and deep. Of the *hips* it is superfluous to say that, without being ragged, they should be large; round rather than wide, and presenting, when handled, plenty of muscle and fat. The thighs should be full and long, close together, when viewed from behind, and the farther down they continue to be so the better. The legs short, varying like other parts according to the destination of the animal; but decidedly short, for there is an almost inseparable connexion between length of leg and lightness of carcass, and shortness of leg and propensity to fatten. The bones of the legs, and they only being taken as a sample of the bony structure of the frame generally, should be small, but not too small—small enough for the well known accompaniment, a propensity to fatten—small enough to please the consumer, but not so small as to indicate delicacy of constitution and liability to disease.

Last of all the *hide*—the most important thing of all—*thin*, but not so thin as to indicate that the animal can endure no hardships; moveable, mellow, but not too loose, and particularly covered with fine and soft hair. We return to the

DEVONSHIRE CATTLE.

The most perfect specimens of the North Devon breed are thus distinguished:

THE BULL.

The horn of the *bull* ought to be neither too low, nor too high, tapering at the points, not too thick at the roots, and of a yellow or waxy colour. The eye should be clear, bright and prominent, showing much of the white, and it ought to have around it a circle of variable colour; but *usually a dark orange*. The forehead should be flat, indented and small; for by the smallness of the forehead, the purity of the breed is very much estimated. The cheek should be small, and the muzzle fine: the nose should be of a clear yellow. A black muzzle is disliked, and even a mottled one is objected to by some who *pretend* to be judges of the true Devon. The nostril should be high and open; the hair curled about the head, and giving at first appearance, an idea of coarseness, which soon wears off. The neck should be thick, and that sometimes almost to a fault.

Excepting in the head and neck the form of the bull does not materially differ from that of the ox, but he is considerably smaller. There are some exceptions, however, to this rule, and as an illustration we would mention the *pure Devon* bull of Mr. *Western*, the father of the cow whose portrait is given. We fancy that we trace in this singular and noble animal the lineaments of the native and scarcely reclaimed British bull.

THE OX.

The head of the Devonshire ox is small, very singularly so, relatively to the bulk of the animal, yet it has a striking breadth of forehead. It is clean and free from flesh about the jaws. The eye is very prominent, and the animal has a pleasing vivacity of countenance, plainly distinguishing it from the heavy aspect of many other breeds. Its neck is long and thin, admirably adopting it for the collar, and even for the more common and rude yoke. The want of the beautifully arched form of the neck, which is seen in the horse, has been considered as a defect in most breeds of cattle. It is accounted one of the characters of good cattle, that the line of the neck from the horns to the withers should scarcely deviate from that of the back. In the Devonshire ox, however, there is a peculiar rising of the forehead, reminding us not a little of the blood horse, and essentially connected with the free and quick action by which this breed has ever been distinguished. It has little or no dew lap depending from the throat.—The horns are longer than those of the bull, smaller and fine even to the base, and of a lighter color, and sometimes tipped with yellow. The animal is light in the withers; the shoulders a little oblique; the breast deep, and the bosom open and wide, particularly as contrasted with the fineness of the withers. The fore-legs are wide apart, looking like pillars that have to support a great weight. The point of the shoulder is rarely or never seen. There is no projection of bone as in the horse, but there is a kind of level line running on the neck.

These are characteristic and important points. Angular, bony projections are never found in a beast that carries much flesh and fat. The fineness of the withers, the slanting direction of the shoulder, and the broad and open breast, imply both strength and speed, and aptitude to fatten.—A narrow-chested animal can never be useful either for working or grazing.

With all the lightness of the Devonshire ox, there is a point about him, disliked in the blood or running horse, and not always approved in the horse of light draught—the legs are far under the chest, or rather the breast projects far and wide before the legs. We see the advantage of this in the beast of slow draught, who rarely breaks into a trot, except when he is goaded on in *catching time*, and the division of whose foot secures him from stumbling. The lightness of the other part of his form, however, counterbalances the appearance of heaviness here. The legs are straight, at least in the best breeds. If they are in-kneed, or crooked in the fore-legs, it argues a deficiency in blood and comparative incapacity for work; and not only for work but for grazing too; for they will be hollow behind the withers, a point for which nothing can compensate, because it takes away so much from the place where good flesh and fat should be thickly laid on, and diminishes the capacity of the chest and the power of creating arterial and nutritious blood.

The fore-arm is particularly large and powerful. It swells out suddenly above the knee; but is soon lost in the substance of the shoulder. Below the knee the bone is small to a very extraordinary degree, indicating a seeming want of strength, but this impression immediately ceases,

for the smallness is only in front—it is only in the bone. It is the leg of the blood horse promising both strength and speed. It may, perhaps, be objected that the leg is a little too long. It would be so in an animal, that is destined only to graze; but this is a working animal, and some length of leg is necessary to get him pleasantly and actively over the ground.

There is a very trifling fall behind the withers, but no *hollowness*, and the line of the back is straight from them to the setting on of the tail. If there is any seeming fault of the beast, it is that the sides are a little too flat. It will appear, however, that this does not interfere with feeding, while a deep, although somewhat flat chest, is best adapted for speed.

Not only is the breast broad and the chest deep, but the two last ribs are particularly bold and prominent, leaving room for the stomachs and other parts concerned in digestion to be fully developed. The *hips*, or *huckles*, are high, and on a level with the back, whether the beast is fat or lean. The hind quarters, or the space from the huckle to the point of the rump, are particularly long and well filled up—a point likewise of very considerable importance both for grazing and working. It leaves room for flesh in the most valuable part, and, like the extensive and swelling quarters of the blood-horse, indicate much power behind, equally connected with strength and speed. This is an improvement of quite modern date. The fulness here and the swelling out of the thigh below, are of much more consequence than the prominence of fat which is so much admired on the rump of many prize cattle. The setting on of the tail is high: it is on a level with the back; rarely much elevated, and never depressed. This is another great point in the blood-horse, as connected with the perfection of the hind quarters. The tail itself is long and

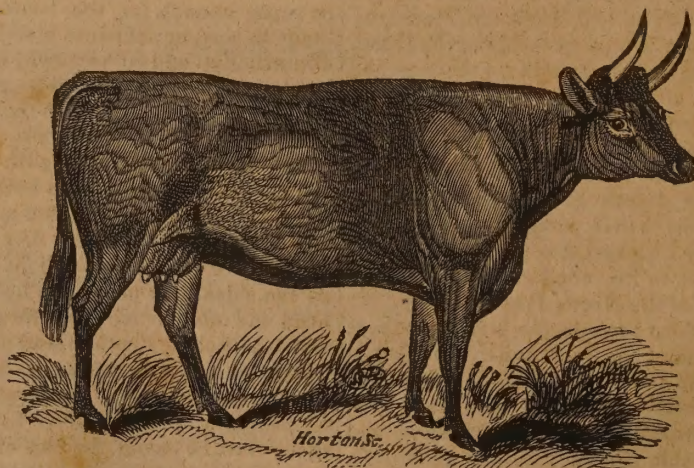
small, and taper with a round bunch of hair at the bottom. The skin of the Devon is mellow and elastic. Graziers know that there is not a more important point than this. When the skin can be easily raised from the hips, it shews that there is soon to set on fat below.

The skin is thin rather than thick. Its appearance of thickness arises from the curly hair with which it is covered, and curly in proportion to the condition and health of the animal. Good judges of these animals speak of these curls as running like ripples of wind on a pond of water. Some of these cattle have their hair smooth, but then it should be fine and glossy. Those with curled hair are somewhat more hardy and fatten more kindly. The favorite color is a blood red. This is supposed to indicate purity of blood in the breed, but there are many good cattle approaching almost to a chesnut hue, or even a bay brown. If the eye is clear and good and the skin mellow, the pale colors will bear hard work and fatten as well as others; but a beast with a pale skin, and hard under the hand, and the eye dark and dead, will be a sluggish walker, and an unprofitable feeder. Those, however, of a yellow color are said to be subject to *steat* (diarrhœa.)

Some breeders object to the slightest intermixture of white—not even a star upon the forehead is allowed; yet a few good oxen have large distant patches of white; but if the colours run into each other, the beasts are condemned as of a mongrel and valueless breed.

These are the points of a good *Devonshire ox*; but he used to be, perhaps he is yet, a little too flat sided, and the rump narrowed too rapidly behind the hip bones; he was not sufficiently ribbed home, or there was too much space between the hip bones and the last rib, and altogether he was too light for some tenacious and strong soils.

THE COW.



There are few things more remarkable about the Devonshire cattle than the comparative smallness of the cow. The bull is a great deal less than the ox, and the cow almost as much smaller than the bull. This, however, is some disadvantage, and the breeders are aware of it, for although it may not be necessary to have a large bull, and especially as those of any extraordinary size are seldom handsome in all their points; but some where or other present coarseness or

deformity, it is almost impossible to procure large and serviceable oxen, but from a somewhat *roomy* cow. These cows, however, although small, possess that roundness and projection of the two or three last ribs which make them actually more roomy than a careless examination of them would indicate. The cow is particularly distinguished for her full, round, clean eye, the gold colored circle round the eye, and the same color prevailing on the inside skin of the ear. The

countenance cheerful, the muzzle orange or yellow, but the rest of the face having nothing of black, or even of white about it. The jaws free from thickness, and throat free from dew-lap.—The points of the back and the hind quarters different from those of other breeds, having more of roundness and beauty, and being free from most of those angles by which good milkers are sometimes distinguished.

We are here enabled to present our readers with a portrait of a cow belonging to that indefatigable agriculturist, Mr. Western. She was rising four years old. With regard to size, she is a favorable specimen of the Devon cow. It will be seen at once how much more roomy and fit for breeding she is, than even her somewhat superior bulk would at first indicate. She is, perhaps, in a little better condition than cows generally are, or should be in order to yield their full quantity of milk.

Their qualities may be referred to three points; their *working*, *fattening*, and *milking*.

In speaking of their fattening propensity, Lord Somerville observes:

"Their next quality is their disposition to fatten, and very few rival them here. They do not indeed attain the great weight of some breeds, but in a given time they acquire more flesh and with less consumption of food, and their flesh is beautiful in its kind. It is of that mottled, marbled character, so pleasing to the eye, and to the taste. Some very satisfactory experiments have been made on this point."

Where the ground is not too heavy the Devonshire oxen are unrivalled at the plough. They have a *quickness of action which no other breed can equal, and which very few horses exceed.*—They have also a degree of *docility and goodness of temper*, and also stoutness and honesty of work, to which many teams of horses cannot pretend. *Vancouver*, in his survey of Devonshire, says, *that it is a common day's work on fallow land for four steers to plough 2 acres with a double-farrow plough.* Four good Devonshire steers will do as much work in the field, or on the road as any three horses, and in as quick, and often quicker time, although many farmers calculate two oxen to be equal to one horse. The principal objection to the Devonshire oxen is, that they have not sufficient strength for tenacious clayey soils: they will, however, exert their strength to the utmost, and stand many a dead pull, which few horses could be induced or forced to attempt. Four oxen or six growing steers, are the usual team employed in the plough.

They are usually taken to work at about two years, or twenty-six months old; and they are worked until they are four, five, or six: they are then grazed, or kept on hay, and in ten or twelve months, and without any further trouble, they are fit for the market. If the grass land is good, no corn, or cake, or turnips, are required for the first winter; but of course for a second winter they must be added. What deserves consideration is, an ox must be worked, in order for him to attain his fullest size. If he is kept idle until he is five or six, he will invariably be stunted in his growth. At six he reaches his full stature, unless he is naturally disposed to be of more than ordinary size, and then he continues to grow for another half year.

During harvest time, they are sometimes *trotted along with the empty wagon, at the rate of six miles an hour*, a degree of speed which no other ox but the Devon has been able to stand. The Devon oxen are rarely shod and very rarely lame.

For the dairy the North Devons must be acknowledged to be inferior to several other breeds. The milk is good, and yields more than an average proportion of cream and butter; but it is deficient in quantity. There are those, however, and no mean judges, who deny this, and select the North Devons even for the dairy.

Mr. *Conyers*, of Copt Hall, near Epping, a district almost exclusively devoted to the purposes of the dairy, preferred the North Devons on account of their large produce, whether in milk, butter, or by suckling. He thought that they held their milk longer than any other sort that he had tried; that they were liable to fewer disorders in their udders; and that being of small size, they did not eat more than half what larger cows consumed.

This aboriginal breed of British cattle is a very valuable one, and seems to have arrived at the highest point of perfection of which it is capable. It is heavier than it was thirty years ago, yet fully as active. Its aptitude to fatten is increased, rather than diminished, and its property as a milk-er could not be improved, without probable or certain detriment to its grazing qualities.

Mr. *Davy*, of North Molton, lately sold a four year old bull, for which the purchaser had determined to give 100 guineas had it been asked.—The Duke of Somerset is a zealous patron and improver of the breed, and has some beautiful cattle; and whatever may be the case at Woburn, the Duke of Bedford, here gives almost exclusive preference to the Devons.

A good North Devon cow fat two calves a year.

THE SOUTH DEVONS.

The *South Devons* are equally profitable for the grazier, the breeder, and the butcher, but their flesh is not so delicate as that of the *North Devons*. Some of these cows seem to unite the opposite qualities of fattening and milking. A South Devon has been known, soon after calving to yield more than two pounds of butter a day, and many of the old southern native breed are equal to any Short-horns in the quantity of their milk and far superior to them in its quality. They are a mixture of the North Devons with the native breed of the country. They often weigh 14 cwt. to the four quarters; and steers of 2½ years are got with fair hay and grass to weigh from 6 to 9 cwt. They bear considerable resemblance to the Herefords, and sometimes the color and the horn and the white face are so much alike in both, that it is difficult to distinguish between them, except that they are usually smaller than the Herefords.

CASE OF SUPERFETATION IN THE COW,

BY MR. W. COWELL, HATFIELD, PEVERIL.

(From the Veterinarian.)

On Saturday, June 29, 1835, about 6 P. M., a cow, belonging to Mr. B——, Woodhamwalter, calved a very fine living calf. The placenta following almost immediately after the foetus, and the cow was left until 9 o'clock, when, much to

their surprise, a second calf was discovered, somewhat smaller than a hare. The cow did well. Not having seen any similar case reported, either in your valuable periodical, or any other work, I have been induced to send you this short history.

INHABITANT TREE.

Along the base of these mountains is a large tree containing seventeen conical huts. They are used as dormitories, being beyond the reach of the lions, which since the incursion of the Mantatees, when so many thousands of persons were massacred, have become very numerous in the neighborhood and destructive to human life. The branches of these trees are supported by forked sticks or poles, and there are three tiers or platforms on which the huts are constructed. The lowest is nine feet from the ground, and holds ten huts; the second about eight feet high, and the upper story, if it may be so called, contains four. The ascent to these is made by notches cut in the supporting holes, and the huts are built with twigs, thatched with straw, and will contain two persons conveniently.—*Stedman's Wanderings in South Africa.*

ON THE SPAYING OF MILCH COWS.

BY M. LEVART, OF LAUSANNE.

(From the Veterinarian.)

In May, 1825, charged by the government of Vaud with the superintendence of the castration of colts in that canton, the opportunity which this afforded me of repeating the experiments made in America on the spaying of the cow, was too favorable to be lost. I extracted the ovaries from a cow destined to be slaughtered. She was not then giving milk, and therefore my purpose could not be fully answered; nevertheless it was something for me to have studied the method of performing the operation, and to have assured myself of its pathological connexion and effect. I should, on another occasion, be enabled to practice the operation with more adroitness, and should probably inspire confidence in those who might think proper to employ me. The cow seemed a little depressed during the first two days after the spaying, but on the third day she had regained all her ordinary habits and spirits.

I was then anxious to operate on a cow that was in the condition indicated by M. Winn, i. e. about a month after her second or third calving.

M. *Francellon Michaud*, to whom I imparted this wish, requested me to make the experiment on one of his cows. She was six years old, and had her third calf. In the preceding years she had given eight quarts of milk at each time immediately after her calving, and six quarts some months afterwards.

On the 28th June, 1833, she was operated on. She appeared scarcely affected by it, except that she did not eat quite so much during the two next days, and her milk diminished to four quarts; but on the third day she recovered her spirits and appetite, and yielded her usual quantity of milk. During the summer she gave seven quarts, although, in the preceding years, she had not been accustomed to yield more than six quarts at this season.

Encouraged by the success of the first experiment, M. *Francellon* begged me to spay a second cow. He chose an old one that gave plenty of milk, in order that he might be able to judge of the effect of the operation on old cows. She was at least twelve years old, and had had two calves in the preceding October that had been got from her with considerable difficulty, and she was accustomed to yield, on the average, about eight eight quarts of milk. She was operated upon, on the 18th November, thirty-three days after calving, and she was then yielding twelve quarts of milk; but it is right to say, that she had a purulent discharge from the *vulva*, and that she did not eat with the appetite she was accustomed to do.

Writers on the spaying of the cow have not described the manner of performing the operation; and it is well known that the ovaries do not retain the same situation in all animals. Daubenton was the first who described the spaying of sheep, but the method which would be pursued with regard to the sheep would not be applicable to the cow. It is on this account that I feel disposed to relate the method which I pursued in spaying these animals.

The operation ought to be performed between thirty and thirty-eight days after calving, and on a cow that had just had her second or third calf, because that is the age and time when she yields the greatest quantity of milk, and retains it during the longest period. No preparation is necessary, except the refraining from feeding her as plentiful as usual on the night before the spaying, and to operate in the morning before she was fed. The necessary implements are ropes, a plank, or a bar of wood, two bistouries, (one convex and very sharp, the other probe-pointed and straight,) two curved needles, some strong thread well waxed, and a plank or bar of wood, about eight inches wide and three in thickness.

In order to operate safely and well, the cow must be properly secured. To effect this, she must be placed against a wall with her left side towards the operator. Three strong rings should be fixed in the wall with straps and buckles attached to them; one for a cord to confine the head, the two others should be placed lower, the one on a level with the lower part of the right shoulder, the other at the point of the hock. A cord should be passed in front of the chest, brought along the left side of the body of the cow, passed behind the thighs, and fixed to the buckle which is on a level with the hock, or rather an assistant should hold the end of the rope passed once around the ring. The head is to be fixed by a turn of the cord, which is to be held by a strong man. Then the plank or bar of wood must be placed obliquely under the teats, and in front of the hind limbs: an assistant holds this, so that the operator may be safe from the kicking of the animal; finally some one holds the tail, or it is tied to the rope that goes round the patient, in order to escape the blows which the animal would give with it when the arm was passed into the abdomen.

In default of a wall provided with rings and buckles, a strong palisade will do, or any solid barrier, or trees growing at a convenient distance

from each other, and to which a strong bar of wood may be fixed.

The animal being secured, the operator, armed with the convex bistoury, which he holds in his right hand, places himself at the left shoulder of the cow, with his left hand resting on her back. That hand serves as a point of support for him to retire or rest upon, if it should be necessary, during her struggles, and also enabling him to use his right hand more effectually. He then places the edge of the bistoury on the middle and a little nearer the superior part of the left flank, and at one incision cuts through the skin and the muscles of that part vertically.

The flank having been opened, and the peritoneum with it, the operator enlarges the incision so as to be enabled to introduce his hand and arm. Taking the bistoury in his left hand, he now gently and cautiously introduces his right hand into the abdomen, directing it towards the pelvis and behind the *cul de sac* of the paunch, where he will find the horns of the uterus. When he had recognized this *viscus*, he carries his hand a little above its bifurcation, where the ovaries are situated between the folds of the *suspensor ligaments of the uterus*; he seizes one of the ovaries, which he detaches at its posterior part, by means of the thumb and fore finger, and he passes his finger along the convexity of the *ovary* in order to separate it completely from the *peritoneal ligament* which sustains it. Then he takes the *ovary* in his hand, he draws it gently towards him, and by means of the thumb nails, he saws the vessels and the horns of the *fallopian tube* on his fore finger, which offers him a point of support under these vessels: finally he breaks the cord by successive gentle tugs at it, while he is sawing it with his nail, and he thus brings out the *ovary*.

He next introduces his hand a second time into the *abdomen*, and proceeds to extract the second *ovary* in the same manner, after which he closes the wound with two or three sutures, taking care to leave a little opening at the lower part of it, through which the matter of suppuration may escape, and which, without this precaution, would burrow between the skin and the muscles, or accumulate in the abdomen, and be a cause of irritation, and probably of danger.

The *ovaries* may, if the operator likes, be brought through the opening made in the flank, and detached by the points of the fingers; but his manipulation may sometimes be attended with inconvenience; besides, it is more expeditious than that which I described, because it sometimes happens that the *ovary* escapes from the grasp, and the arm must be once more introduced into the belly in order to find it again.

Two or three days after the operation, the wound may be dressed. The dressing consists in fomenting around the wound two or three times every day, and in hot weather in putting a little of *l'eau de Labarraque* (a solution of chloride of lime.) A pledget of tow should be placed daily over the wound itself, and the stitches occasionally tightened.

The wound will usually be quite healed in the space of fifteen days, or three weeks at most.

From the observations I have since been enabled to make, I should offer the following as the advantages to be expected from spaying cows:

1. An increase of at least one-third in the production of milk.
2. The certainty of having a nearly equal supply at all times.
3. Escape from the chances and accidents that accompany utero-gestation and parturition.
4. Escape from the accidents which happen to cows during the period of heat, arising from their riding and worrying one another, or their being injured by too large a bull.
5. The disposition to fatten more readily, and to greater extent, when their milk begins to fail.
6. The saving of an expense, often considerable, arising from barren cows, and which, in some districts and on some farms, either from the influence of breed or bad management, occurs to almost every cow once in two or three years. As an illustration of this, I mention, that, in the neighborhood of Lausanne and Lavaux, the farmers are often obliged to change their cows, an expense almost ruinous to them.

Recueil, Feb. 1834.

[From the New York Farmer.]

PLOUGHING IN OF GREEN CROPS.

As winter evenings seem to afford a suitable opportunity for intellectual improvement, and considering that the pages of a periodical of this kind are dependent very much on correspondents for matters of information, and that it is the part of every subscriber to contribute his mite to the improvement and information of the readers of an agricultural work of this nature, I have ventured to pen a few of my thoughts.

The farmers of almost every section of country differ materially in their modes of farming, and opinion respecting the most profitable manner of converting the produce of their farms into money. Their difference of opinion is certainly allowable and natural when we take into consideration the difference of soils, the distance from markets, the difficulty in most neighbourhoods of obtaining proper help, &c., all of which the farmer has to accommodate himself to in the best manner he can. The business of a farmer is in my opinion an independent, an honorable and, when properly pursued, a profitable one; and no doubt, so long as our country continues in prosperity, the increasing demand for produce will insure to the farmer a handsome remuneration for the products of his soil.

Ploughing in of green crops, as practised in the State of New-York, is so economical a mode of enriching the soil, that I have often marvelled it is not practised to a much greater extent in other places. Allow me to recommend the spreading of a coat of lime previous to ploughing in.

If the slovenly farmer who allows his weeds to grow up unmolested and cover his fields, would, instead of this, plough them under, after a few repetitions of this, he would be surprised at the increased fertility of the soil, and save the labor of carting manure from a distance.

With respect to the best crops for turning under, there are various opinions; rye and red clover are perhaps as much in use as any others, though some plough in oats, millet, turnips, &c. In dry situations this practice succeeds best, as by the ground remaining exposed to wet the crop turned under would not be so likely to rot.

With regard to turnips for ploughing in, I must

acknowledge myself an unbeliever; I have heard of its being done to profit by others, but have seen it tried in my own neighbourhood without success. Perhaps, however, it is owing to some difference in cultivation or soil with which we are unacquainted. It would confer a favor on us Jersey men if some of your successful New-York farmers would furnish us with their experience on the subject of ploughing under green crops for manure, and on other modes of economising that very expensive yet indispensable material in the business of agriculture. JUNIUS.

[From the American Gardener's Magazine.]

THE INFLUENCE OF FLOWERS. By C. C.

"Are not flowers the stars of earth, and are not stars the flowers of Heaven? Flowers are the teachers of gentle thoughts, the promoters of kindly emotions."

Among the many indications of the advance of our country in taste and refinement, none afford a surer criterion than the increased attention which is given to flowers and fruit. When we notice the many establishments in our vicinity, within a few years, devoted to the improvement of horticulture, we cannot but rejoice at the diffusion of an employment so well adapted to afford much pure and innocent pleasure; and we doubt not the time will soon arrive, when the cultivation of flowers will be pursued as a means of moral and intellectual advancement, as well as a source of exquisite gratification.

Every thing which tends to increase domestic enjoyment, which furnishes to a family that pleasure at home, which otherwise they would be impelled to seek elsewhere, is valuable. There is nothing which adds more to happiness, than for all the members of a family to be united in one common and pleasant pursuit—not that all should have the same daily occupation—but that there should be some sources of pleasure open to all, and to increase which, all should in their turn contribute. No employment, perhaps, can so effectually give this union of purpose, and this sympathy of feeling, as the cultivation of flowers. It opens a wide prospect of enjoyment, with scenes to suit many varying tastes. To the scientific mind, to one who loves to search out causes and effects, to discover the hidden properties and qualities of things, what an interesting and yet almost untrodden field does botany present! Then to one whose heart predominates over the intellect; who delights in sentiment; who prefers deep feeling to lofty thought, a garden yields many exquisite delights. His poetic mind gathers much of its finest imagery, its most beautiful thoughts, from the fragrance and loveliness of flowers, and it is quickened and enlightened by the thoughtful contemplation of their varied graces.

And for humbler purposes, for less exalted natures, the riches of Flora furnish many gratifications. For the morning drawing-room, or for the evening dress, there can be no prettier or more appropriate ornaments than can be found among her stores. And to the affectionate heart, what sweeter tribute can be offered to the invalid mother, or the declining sister, than the first-fruits of the garden, and the first buds of the rose. Even the little child laughs, in the fulness of its happiness, when it is permitted to play with

the flowers, and fill its lap with the butter cups and clover blossoms.

And so it is in this one amusement; all ages and all tempers can find an appropriate gratification; all may be made more happy. It ministers, also, to man's moral nature. A green-house, connected, as we sometimes see them, with the most frequented apartments of a family, is, in winter, when the garden is bereft of its beauty, and the orchard has yielded its fruit, an almost unailing source of its interest. To enjoy, when storms are beating without, and the chill of winter speaking in the howling wind, the mild air, the fragrance, and the beauty of this reserved fragment of summer, tends to produce feelings of contentment and satisfaction—feelings which show themselves forth in acts of kindness and words of affection.

Another advantage which the cultivation of flowers affords over other pleasures is, that it can hardly be wrested to evil. Absorbing as it is, it produces no feverish excitement. Bringing the mind into close contact with the loveliest things in nature, it shuts out the vexatious feelings arising from collision with the world. Its pleasures are all calm and tranquil. The contemplation of any of the works of God has a mighty effect in soothing and quieting the tumult of human passions, and this precious power over the heart is freely given, even to the lilies of the field.—Where we see a love for these, that is not the place to look for the turbulence of passion, or the debasements of sensuality. When we see by the road-side a cottage, around whose door the sweet-briar and the honey-suckle are climbing, and before which, in its little garden, is displayed even the humbler flowers—the marygold, the pansy, the aster, and the poppy—how instinctively do we form a favorable opinion of the inhabitants of that cottage; how certain we may be of finding peace, contentment, and affection, inmates here! C. C.

It is a fact justified by experience and warranted by experiment, that roots, when cooked or boiled, are far more nourishing and give more milk than when raw.

It is a fact that hay and straw cut and steamed is much more nutritious than when given long and uncooked, and that one third less will answer.

It is a fact that all grain, as corn, oats, and rye, should be ground before being fed to horses and cattle, and that much less will answer than when fed in the grain, and it is a fact too, that the meal if made into a warm mess in winter, would be improved in its nutritious qualities.

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Notices—of an article on the Devonshire cattle—of a new variety of potatoes—of the method of raising potatoes in Louisiana—of the Queen Anne county Silk Company—the way to accumulate manure—remedy for weevil in wheat—old method of measuring corn—a carnivorous editor—an interesting account of the Devonshire breed of cattle, together with a portrait of a Devon cow—case of superfetation in the cow—account of an inhabitant tree—paper on the spaying of Milch cows—ploughing in of green crops—the influence of flowers—value of cooked food for cattle—prices currents and advertisements.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,	bushel.	2 50	
CATTLE, on the hoof,	100lbs.	5 00	6 00
CORN, yellow,	bushel.	new	70a72
White,	"	do	70a72
COTTON, Virginia,	pound.	18½	—
North Carolina,	"	—	—
Upland,	"	18½	20
FEATHERS,	pound.	37	40
FLAXSEED,	bushel.	1 25	1 37½
FLOUR & MEAL—Best wh. wh't fam.	barrel.	8 00	8 50
Do. do. baker's,	"	7 50	8 00
Do. do. Superfine,	"	7 25	—
SuperHow. st. in good de'd	"	7 00	—
" " wagon price,	"	6 75	—
City Mills, extra,	"	6 75	7 00
Do.	"	6 75	6 87
Susquehanna, firm & scarce	"	6 75	6 87
Rye,	"	5 00	5 25
Kiln-dried Meal, in hhds.	hhd.	19 50	20 00
do. in bbls.	bbl.	4 37	4 50
GRASS SEEDS, red Clover,	bushel.	5 00	5 75
Timothy (herds of the north)	"	2 75	3 25
Orchard,	"	2 25	3 00
Tall meadow Oat,	"	2 00	2 50
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.	—	15 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
Hogs, on the hoof,	100lb.	7 00	7 50
Slaughtered,	"	7 00	7 50
Hops—first sort,	pound.	12½	—
second,	"	10	—
refuse,	"	8	—
LIME,	bushel.	33	35
MUSTARD SEED, Domestic,	"	5 00	6 00
OATS,	"	42	45
PEAS, red eye,	bushel.	—	—
Black eye,	"	—	1 25
Lady,	"	—	—
PLASTER PARIS, in the stone,	ton.	—	3 50
Ground,	barrel.	1 25	—
PALMA CHRISTA BEAN,	bushel.	2 00	—
RAGS,	pound.	3	4
RYE,	bushel.	88	90
Susquehanna,	"	none	—
TOBACCO, crop, common,	100 lbs	5 00	5 50
" brown and red,	"	5 00	7 00
" fine red,	"	7 00	9 00
" wrappery, suitable	"	—	—
for segars,	"	5 00	10 00
" yellow and red,	"	6 00	8 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality, ..	"	4 75	5 00
" ground leaf,	"	5 00	8 00
Virginia,	"	6 00	—
Rappahannock,	"	—	—
Kentucky,	"	8 00	14 00
WHEAT, white,	bushel.	1 40	1 45
Red,	"	1 35	1 40
WHISKEY, 1st pf. in bbls. }	gallon.	37	37½
" in hhds. }	"	33½	—
" wagon price,	"	30	bbls.
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 50	—
To Wheeling, ..	"	1 75	—
WOOL, Prime & Saxon Fleeces, ...	pound.	55 to 68	30 to 32
Full Merino,	"	48 55	28 30
Three fourths Merino,	"	45 48	26 28
One half do.	"	40 45	24 26
Common & one fourth Meri.	"	36 40	22 24
Pulled,	"	38 40	23 24

2,000 MORUS MULTICAULIS.

FOR SALE by R. Sinclair, Senr., at Clairmont Nursery, 2,000 Morus Multicaulis trees (the Chinese Mulberry.) These trees are between 7 and 8 feet high, and if planted out this fall might be fed from to advantage next spring. Persons desirous of purchasing, would do well to make early application. Their superiority for feeding silk worms is universally admitted.

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BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured....	pound.	11	—
Shoulders,.... do.	"	10	—
Middlings,.... do.	"	8½	9
Assorted, country,....	"	7	8
BUTTER, printed, in lbs. & half lbs.	"	18½	25
Roll,.....	"	20	—
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old....	each.	3 00	6 00
Cows, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 75	1 87
CHOP RYE,.....	"	1 81	1 87
EGGS,.....	dozen.	—	—
FISH, Shad, No. 1, Susquehanna, barrel.	"	7 75	—
No. 2,.....	"	6 75	—
Herrings, salted, No. 1,.....	"	4 00	4 12½
Mackerel, No. 3,.....	"	5 75	—
Cod, salted,.....	cwt.	3 00	35 0
LARD,.....	pound.	10	10

BANK NTOE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	VIRGINIA.
U. S. Bank,.....par	Farmers Bank of Virginia.....a½
Branch at Baltimore,....do	Bank of Virginia,.....do
Other Branches,....do	Branch at Fredericksburg do
MARYLAND.	
Banks in Baltimore,....par	Petersburg,.....do
Hagerstown,....½a	Norfolk,.....do
Frederick,.....do	Winchester,.....do
Westminster,.....do	Lynchburg,.....do
Farmers' Bank of Mary'd, do	Danville,.....do
Do. payable at Easton,....do	Bank of the Valley,....do
Salisbury,.... 5 per ct. dis.	Branch at Romney,.... 3
Cumberland,.....do	Do. Charlestown,....do
Millington,.....do	Do. Leesburg,....do
DISTRICT.	
Washington,.....Banks, ½.	Wheeling Banks,....1½a2
Georgetown,.....do	Ohio Banks, generally 2½a3
Alexandria,.....do	New Jersey Banks gen. 1½a2
PENNSYLVANIA.	
Philadelphia,.....½a	New York City,....½a
Chambersburg,.....½a	New York State,....2½a3
Gettysburg,.....do	Massachusetts,....2a2½
Pittsburg,.....1½a2	Connecticut,....2a2½
York,.....½a	New Hampshire,....2a2½
Other Pennsylvania Bks. 1½a2	Maine,.....2a2½
Delaware [under \$5]....3a4	Rhode Island,....2a2½
Do. [over \$5].....½a3	North Carolina,....2½a3
Michigan Banks,.....½a3	South Carolina,....2½a3
Canadian do.....½a	Georgia,.....3a3½
	New Orleans,.....4

WHITE TURKEYS.

A few pair of White Turkeys would be purchased at the Agricultural Repository in Light near Pratt street, by
de 29

ROBERT SINCLAIR JR.

SAXONY RAMS.

The editor of the Farmer and Gardener has for sale 2 full blooded Saxony RAMS, and 2 ¾ blooded do. These sheep are of a family remarkable for their fine fleece, their wool always commanding the best prices in the market.

ALSO

The bull *Brilliant*, a large sized animal of the Improved Durham Short-horn breed. He is red and white; was got in England, and calved in Frederick county, Md., on the 12th May 1829. His dam was Matchless, got by Favorite, (purchased at the sale of the late R. Colling, a celebrated breeder) son of Favorite, dam by H. Allison's Gray bull, sire Orlando, that died on the passage from Liverpool, out of Rosina, from Yorkshire, that gained the highest prize premium of ten sovereigns at a Cattle show in Manchester, England.
no 3

FOR SALE ON MODERATE TERMS.

THE editor of the Farmer and Gardener has for sale two most beautiful Devonshire Bulls, rising three years of age each, of pure and celebrated blood. Also, one Bull 4 years old, a cross between a full bred Durham bull and a pure Devon cow. This noble animal combines in a remarkable degree the good points of both breeds. To gentlemen of the south who may desire to improve their stocks of cattle, the present is an opportunity rarely to be met with. All letters to the editor upon the subject must be post paid.
de 29

THE SALMAGUNDI,
AND NEWS OF THE DAY.

Embellished with a multitude of Comic Engravings.

A new periodical, of a novel character, bearing the above appellation, will be commenced on the beginning of January, 1836. While it will furnish its patrons with the leading features of the news of the day, its principal object will be to serve up a humorous compilation of the numerous lively and pungent sallies which are daily floating along the tide of Literature, and which, for the want of a proper channel for their preservation, are positively lost to the Reading world. Original wits and humorists of our time will here have a medium devoted to the faithful record of the scintillations of their genius. It is not necessary to detail the many attractions which this journal will possess, as the publisher will furnish a specimen number to every person who desires it—(those out of the city, will forward their orders, postage paid)—and he pledges himself that no exertions on his part shall be wanting to make each succeeding number superior in every respect to the preceding ones.

THE SALMAGUNDI will be printed on large imperial paper, equal in size and quality to that which is at present used for the Gentleman's Vade Mecum. It is calculated that MORE THAN 500 ENGRAVINGS will be furnished to the patrons of this Journal in one year—these, in addition to an extensive and choice selection of Satire, Criticisms, Humour, and Wit, to be circulated through its columns, will form a Literary Banquet of a superior and attractive order; and the publisher relies with perfect confidence on the liberality of the American public, and the spirit and tact with which this expensive undertaking will be prosecuted, to bear him successfully and profitably along with it.

The terms of THE SALMAGUNDI will be TWO DOLLARS per annum, payable invariably in advance. No paper will be furnished unless this stipulation is strictly adhered to. Clubs of three will be supplied with the paper for one year, by forwarding a five dollar note, postage paid. Clubs of seven will be supplied for the same term, by forwarding a ten dollar note. The papers that are sent out of the city will be carefully packed in strong envelopes, to prevent their rubbing in the mail.

THE SALMAGUNDI will be published on alternate weeks—otherwise it would be impossible to procure the numerous Embellishments which each number will contain—and the general interest it will afford must be enhanced by this arrangement.

All orders must come postage paid.

Address, CHARLES ALEXANDER, Athenian Buildings, Franklin Place, Philadelphia.
de 29

THE SILK MANUAL.

JUST published and for sale by Sinclair & Moore and Robt. Sinclair, Jr., at the Maryland Agricultural Repository, Light near Pratt street, Baltimore, a complete Manual of the Silk Culture, in which plain instructions are laid down for the culture of the Mulberry, the feeding of the Silk worms, management of the cocoons, reeling, spinning and dyeing of the Silk. In fine, it is a perfect Manual, and comprises every department of the business. The rules are arranged in so plain and methodical a manner that every one can understand them, and by a very few hours attention become master of the business. It is clearly demonstrated in this Manual, that largely upwards of \$500 may be netted from an acre in the Culture; and it is a singular fact connected with the Mulberry as adapted to the making of Silk, that poor dry, sandy, or gravelly land suits it best, the fabric made from worms fed on leaves raised on such soil, being greatly superior in elasticity and richness of gloss to those grown on rich grounds.

Price—per copy, 50 cents.

Liberal discounts made to the trade.

Printed by Sands & Neilson, N. E. corner of Charles and Market streets.

TO AGRICULTURISTS.—The analysis of Soils, marls, mineral waters, and other productions, interesting to those engaged in Agricultural pursuits, is performed with promptness and accuracy, by

TYSON & FISHER, Chemists,
no 3 Druggists, No. 192 Market street, Baltimore.

LEON.

THE splendid bull LEON, is now at Clairmont Nursery, where he will remain a few weeks. He is a full blooded improved Durham short horn, and allowed to be one of the best bred animals in the country. He will serve Cows at \$5 each. He is milk white, with a hide as glossy and soft as satin. For his pedigree, see the advertisement, in which he is offered for sale in this day's paper.
no 3

DEVON STOCK.

THE editor of the Farmer and Gardener can at all times supply orders for Devon Cattle. This breed is so distinguished for their easy keep and docility; the richness of the milk of the cows, and for the activity and sprightliness of the oxen, that they would be admirably suited to the purposes of southern agriculturists.

The happy adaptation of the Devonshire Oxen, for the purposes of the farm, will be understood, when it is stated that 4 oxen have been known to plough 2 acres of ground in a day, and a team of them to trot at the rate of six miles an hour with an empty wagon.

Any person wishing to procure them can be supplied by addressing a letter post paid to the editor of the Farmer and Gardener.
nov 10 4t

FOR SALE.

A DURHAM Short-horn bull 15-16 blood. He is from a fine cow and got by Col. Powell's celebrated bull *Monk*—now two years old. Price, delivered at York, Pa., \$130.

Letters addressed to the editor post paid, will be attended to.
nov 10 2t

A GREAT BARGAIN.

A full blooded Improved Durham Short-horn bull rising five years old, and his 3 sons from 1½ to 2 years old each, 7-8 bred, has been left with the editor of the Farmer and Gardener for sale. These are first rate animals, and would be sold a bargain, if application be made promptly.

All applications by letter must be post paid.
nov 17 3t.

FOR SALE,

A HEIFER, rising a year old, in calf by Leon, with a pedigree which makes her a 15-16th bred improved Durham Short horn—she is well grown, and prettily marked.—Enquire of the editor.
no 3

RUFFLE OATS,

For seed, may be had at the Maryland Agricultural Repository, Light street, Baltimore, by application to
Dec. 8 JAMES MOORE.

GRIST MILLS.

THE subscriber has for sale at the Maryland Agricultural Repository, a few of those effective Grist Mills, so much approved of by gentlemen who have tried them. They are adapted to horse-power, and with ease will manufacture 3 bushels of grain into the most beautiful lively meal in an hour.
Dec. 8 JAMES MOORE, 4t.

STOCK OF IMPROVED SHORT HORN DURHAM.

THE editor of the Farmer and Gardener, Baltimore, has for sale two 7-8 and four 3-4 bred cows, 2 full bred and seven 7-8 bred bulls of the improved short-horn breed. They are all fine animals whether regard be had to their milking or fattening propensities. Their pedigrees are indisputable, all tracing to the British Herd book. They will be sold low for cash, their excellence being considered.—To any person, company, or society, who may want several, a great bargain would be given.

Letters addressed to the editor upon this subject, must be post paid.
nov 10 4t

RUEFFIN ON CALCAREOUS MANURES,
SECOND EDITION, just received at this office.

ALSO,
A few pounds of the celebrated SKINLESS OATS, price 50 cents per lb. said to produce 80 bushels per acre.
R. SINCLAIR, jr. Seedsman,
oc 13 2t connected with this office

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 36.

BALTIMORE, MD. JANUARY 5, 1836.

Vol. II

THIS publication is the *successor* of the late **AMERICAN FARMER**, and is published at the office, on the *west side of Light, near Pratt street*, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, JAN. 5, 1836.

A HAPPY NEW YEAR TO ALL.

We tender to our friends and patrons the compliments of the New Year, and wish them in all sincerity of heart, the possession of every enjoyment which health, happiness, and ample means can secure them. And while we are enumerating other blessings, we would not omit to offer up our prayers that long life may be added to the number, and as life itself is only valuable when spent in the pursuit of noble ends and practice of virtuous actions, we sincerely hope that each revolving year may add to the measure of their claims upon the respect and love of their fellow men.

With our next number, we shall send a copy of our *Silk Manual*, as a New-Year's present, which we shall pray our subscribers to accept as an humble testimonial of our earnest desire to promote the interests of agriculture.

THE SHAKERS.

The account of the society of the Shakers, which we give in another column, is full of interesting matter, whether we have relation to the internal police of that singular people, or to their system of farming. There is none of us but might learn something from the exemplary propriety with which they fulfil every duty connected with the tilling of the earth. They do every thing at the right time, in the right way, and with every possible regard to true economy. We say this of their farming, and would not wish to be thought as intending to sanction the peculiar depopulating tendency of their faith; for ourself we are disposed to let the world wag on in the old way, without contributing our mite to decrease population; for be it known unto all men, as the lawyers say, that, so far from being friendly to celibacy, we would make it a penal offence for any man to be a bachelor at 30 years of age.

LIME.—In *Wales*, the lime-burners have changed their method of calcining the stone. Instead of using *kilns* as formerly, they now manufacture the article without any kiln at all, by simply managing it as charcoal pits are burned in this country. The lime-stone is placed in large bodies, which are called *coaks*, the stones not being broken small as in the ordinary method. The lime thus obtained is said to be preferable to that burnt in the ordinary kilns. This plan would be especially desirable where transportation is an object, as the crude stone could be taken to the field whereon it may be intended to be used, and there converted into lime; thus saving much trouble and expense in hauling.

BURNING SURFACE SOIL AND CLAY.

The following method of burning surface soil and clay, as practised by that judicious farmer, Mr. *Curwen*, may be not only interesting but useful to many agriculturists, where ashes is difficult of obtainment.

"Mounds of seven yards in length, and three and a half in breadth are kindled with 72 bushels of lime. First a layer of dry sods or parings, on which a quantity of lime is spread, mixing sods with it, then a covering of 8 inches of sods, on which the other half of the lime is spread and covered a foot thick; the height of the mound being about a yard. In 24 hours it will take fire. The lime should be immediately from the kiln. It is better to suffer it to ignite itself, than to effect it by the operation of water. When the fire is fairly kindled, fresh sods must be applied. I should recommend, says Mr. *Curwen*, obtaining a sufficient body of ashes before any clay was put on the mounds. The fire naturally rises to the top. It takes less time, and does more work to draw down the ashes from the top, and not to suffer it to rise above six feet. Where lime-stone can be had, a small quantity in the mounds serves to keep the fire up and improve the quality of the ashes.

FILLING UP GULLIES.

The following deserves attention, and will doubtless receive it. The injurious effects of galls and gullies, and the difficulty of filling them up, so as to *remain*, have long been sources of vexation as well as a heavy tax upon the labor of the husbandman; but if the method recommended below should prove, on trial, to answer as well with others as it has done with the writer of the subjoined communication, the means of

cure will be so simple, and the expense so trifling, that galls and gullies must soon disappear from among us.

[From the *Tennessee Farmer*.]

HERDS GRASS.

I have recently applied this grass to a new purpose; and, was led to this application of it, by a knowledge of the very strong turf it forms upon morasses. This turf is nothing more, than a kind of carpet formed by the long and abundant root of this grass, so interwoven, as to bear the weight of animals grazing.

A thought occurred, that the root of this grass might be applied to the stopping of gullies—channels washed out by the rains. I fell to work, and in three years, I succeeded in filling up one of 300 yards in length, and one to two feet in depth.

This gully being near the middle of one of my cotton fields, and at places impassable with the plough—was quite a nuisance in that respect, as well as being a fine vehicle to carry away my soil.

Be it known; I had tried rock walls; they made the rent worse; brush and stumps, also.—Now, if any one of the readers of the *Farmer* should not have learned this mode of filling gullies, let him try it—and do it in the following manner. Put in a few cotton or corn stalks, or brush, and scatter the herds grass in with it, without threshing, it will not then so easily wash away; and the task is done.

When your grass takes root in the bottom of a gully, it catches the sediment as it passes; thus, by the operation of natural causes, the evil is removed; and that law, (in part) which formed the gully, stops it. Here is no art nor science, but a little common sense. When your gully becomes full—and it will—suffer the plough to slide over and not plough up the grass, else the gully might re-form. The grass will occupy a row or two in width, so would the gully, with this difference; the grass will make fine hay, and afford grazing too—so nothing's lost.

V*****
Wilson Co., Nov. 19, 1835.

WORK FOR JANUARY.

ON THE FARM.

The superficial thinker will, perhaps, conclude that there is but little to be done on the farm this month; the practical farmer, however, will as readily detect his error, and see in the opening of the new year, ample field for the employment of the time of his hands and himself, and though if he be a systematic man he will never permit himself to be *hurried*, yet *he* and *his*, will always be

busy. In this, we take it, consists the great art and mystery of good farming. As a new month as well as a new year has just unfolded itself, the judicious farmer will form his plans of operation for the coming season, and here let us bespeak in advance, that in conning over his thoughts and making up his mind, as to the particular articles of his culture, not to forget that by being generous to his stock, they will repay him with a *liberality* so prodigal that it will shame the utmost measure of his bounty. And as the present is a period that bears hard upon cattle and stock of all kinds, particular attention should be paid to them. They should be all sheltered from the weather.—The milch cows and horses should be in the stable, or under cover, where they can be kept dry and warm every night, as also during rainy and inclement days. The hogs should have a pen where they can sleep comfortably, and they should receive either a few ears of corn, or a portion of roots each day. The sheep should be provided with sheds, where they can be kept dry, and if you have many, they should be divided, so that not more than twenty should be in the same apartment—a gill of meal each, or a few roots a day, in addition to hay and fodder, with salt twice a week will keep them in good health. In a corner of your fold yard, keep a box or tub with a mixture of tar and salt, where they may go and lick it.

Your *work-horses* should be well fed throughout this month, and if their corn and other grain were ground into meal, one-third less will keep them in good heart—and an equal saving of hay and straw may be effected, by feeding it cut and steamed. The price of a steam apparatus, on a large farm would be saved in a month.

If you desire that your milch cows should repay you for keeping and milking them, *keep them well.* Unless you give them roots and other succulent food, it is impossible they can *secrete* milk: and whatever roots or other food you give them, should either be boiled or steamed.

Look to your ploughs, harrows, and other implements of husbandry. If they are out of order have them repaired: if too old for that, supply their places with new ones; for you may rest assured that without good tools your work cannot be well done. Keep all your implements of husbandry under cover.

If you have a field infested with garlic, St. Johnswort, or any other pest, that you wish to extirpate, and a series of favorable days should intervene during this month, put your ploughs in, throw up a furrow, and expose the roots to the frost.

Examine all your fences and buildings, and im-

prove the time, by suitably repairing such as need it. If you have any new fencing to make in the spring, get out your posts and rails: now is the time to cut them; they will last ten years longer than if got out in the spring, after the sap is up.

Before we conclude our brief sketch of what is necessary to be done, we would fain have a word with every practical farmer who is a reader of our paper.

Have you made up your mind with regard to entering into the mulberry culture? If you have not, let no consideration deter you from it longer than the coming spring. A few dollars laid out in White Mulberry seed, and *Morus Multicaulis* cuttings, if these should be judiciously cultivated, would lay the foundation of future independence. We wish the farmer in moderate circumstances to bear in mind that a *single acre* in Mulberries, will clothe and educate his children; that five will enable him to live sumptuously, and lay by enough in ten years to leave his family independent. We wish the farmer of large possessions to recollect, that *fifty acres* cultivated in Mulberries, will nett him more than twenty thousand dollars a year:—and we wish them both to recollect, that if they expect to *prosper* in, and *profit* by, the silk culture, they must not slumber during the five or six weeks that the worms are engaged in their labors—that during that short period, every attention must be paid to keep their apartments well aired and clean, and to feed the worms regularly—and we would impress these truths upon them most forcibly—that the cultivation of the mulberry, and the making of silk, is no less *simple* than profitable, and that the whole art is comprised in a single word—*care*.

CINCINNATI AND CHARLESTON RAIL-ROAD.

The following report from the Hon. Charles Y. Hayne, chairman of the Charleston committee, on the present prospects of making the above road, will be read with pleasure by many of our patrons, and we, therefore, give it a place in our columns. Next to good crops, every farmer should desire good roads, as, after all, without the conveniences of transportation the most abundant yields of produce would prove of but little value, comparatively speaking. As a friend to it we rejoice sincerely to find that this great work is about to be undertaken under auspices so flattering, and which promise so well for its successful completion.

REPORT.

I have the honor to Report to the Committee, that in compliance with their Resolution to that effect, I proceeded to Columbia, and immediately on my arrival, called a joint meeting of the Columbia Committee of Correspondence, and that

portion of the Charleston Committee then at that place, when it was unanimously resolved, to call a public meeting of the citizens of Columbia, and of all others favorable to the proposed Rail Road, with a view to arrange measures for bringing about entire *harmony and concert of action* in reference to this great work. The meeting accordingly took place in the Hall of the House of Representatives, and was attended by nearly all the Members of the Legislature and a large number of citizens from all parts of the State, Governor McDuffie presided, and an *entire unanimity* marked the proceedings of the meeting. The Resolutions adopted, recommending a RAIL ROAD CONVENTION at Knoxville, Tennessee, on the 4th of July next, to which all those who may feel an interest in the proposed Road are invited to send Delegates, having been already published, I shall here only state that the Reports of our Engineers, which were verbally made to the meeting, were of the most interesting character, and altogether satisfactory. It appeared from their statements, that from a careful exploration of the Mountains on the borders of this State, as well as of the Cumberland and Clinch Mountains, separating Kentucky from Tennessee, that very erroneous impressions had prevailed with regard to the obstacles they present to the construction of a Rail Road. The elevations were found to be less than had been anticipated, and *passes* were discovered by which the Road may be constructed without any serious difficulty. Without deciding on the best route from the mountains to the seaboard, it was ascertained that the face of the country is altogether favorable to the work. A detailed Report from the Engineers will be submitted to you, as soon as the same can be prepared. This cannot be done, however, until Col. Gadsden's return to Charleston, who has, at the request of the Joint Committee, accompanied Col. F. H. Elmore, to the capitol of North Carolina, for the purpose of obtaining the co-operation of the Legislature of that State in the measures deemed necessary in the further prosecution of the work. These measures consists (as you are aware) of an act to be passed by the Legislatures of all the States through which the Road will pass, providing for *surveys and estimates*—and an act granting a *Charter* to such persons as may hereafter subscribe to the Stock of a Joint Company for the construction of the Road. These are all the measures deemed necessary to be adopted *at this time*, and it is confidently expected, that the application which Col. Blanding has been authorized to make to the Legislatures of Tennessee and Kentucky, and which Cols. Elmore and Gadsden will make to the Legislature of North Carolina, will be crowned with success. Before I left Columbia, the success of both of these measures, in our own Legislature, was *rendered certain*; indeed I have every reason to believe they will be passed unanimously, and that the Survey Bill will contain so liberal an appropriation as to enable us to complete all the necessary surveys, should no other State appropriate a dollar towards that object. It is highly probable that in addition to the above, our Legislature will, in some authoritative shape, declare that South Carolina will do whatever may be necessary on her part, to effect the work, should the surveys about to be made establish its practicability. The Joint Committee

did not deem it advisable to ask for any thing further than the two above mentioned Acts, during the present session. It is expected that all the surveys will be completed during the ensuing spring and summer, and subscriptions for stock will then be opened in all the States interested; and from the temper of the Legislature and people of this State, I think we may safely calculate that South Carolina will be prepared to do *her part of the work*. Indeed, if necessary, the State will doubtless come forward, and contribute liberally towards it. From all that I have seen or heard on this subject—from the temper of the Legislature, and the tone of the late public meeting at Columbia—I feel myself warranted in repeating to you, that the condition of public sentiment in this State is *as favorable as could be desired*; and our accounts from these portions of North Carolina, Tennessee and Kentucky, through which the Road must pass, as well as from the State of Ohio, are *equally favorable*. From the other portions of these States, we are without information. It is proposed that the surveys shall be commenced as soon as the Legislatures of the several States shall have acted on the Survey Bill now before them. In making these surveys, it will be indispensable that all the practicable routes should be carefully examined, as well through this State as beyond her limits, and that the public should be fully satisfied, from actual surveys, carefully and impartially made, that the route which may be finally selected, is justly entitled to the preference. This proceeding will satisfy every one, and I doubt not secure the cordial co-operation of all the people of this State.

All which is respectfully submitted.

ROBT Y. HAYNE, Chairman.

Charleston, 12th Dec., 1835.

P. S.—It should be here added, that Major Earle, in behalf of the citizens of Greenville, submitted to the Committee the result of an exploration of a route across the *Saluda Mountain*, accompanied by a Map, from which it appeared that by the aid of a *Tunnel* of three-eighths of a mile, the Road can be carried across that mountain.—This route, and all others that may be pointed out, will doubtless be surveyed by the Commissioners about to be appointed by the State.

[From the Cultivator.]

CORN—POTATOES—RUTA BAGA.

Trenton, Oneida Co., Nov. 1835.

DEAR SIR—Agreeably to your request, when I saw you in May last, I herewith transmit to you the result of some experiments, &c. at that time contemplated making, particularly in the growth of Indian corn, potatoes, and ruta бага turnip. This section of country is celebrated for grass and grazing, and most of our farmers have embarked in the dairy business, under a belief that the soil and climate is unfavorable to the growth of all kinds of grain excepting oats. This being the second year that agricultural business has occupied exclusively my attention, my operations as yet are small.

I had a ten acre lot of stiff, strong sward, that had not been ploughed for many years; this I intended turning over chiefly for Indian corn; in one corner of which I measured off one acre for corn, and by the side of it, one other acre for po-

tatoes, drew on about twenty loads yard manure to the acre, on each, turded it over, following the plough with the roller, harrowed and furrowed it three feet apart from north to south, put down about the same quantity of manure in the hills that was turned under. Commenced planting corn 20th May, seed soaked, rolled in tar and water and plaster; put down 4 grains in a hill, one foot apart; we planted the first day about one quarter of an acre, which came up well, the rest was planted on the 22d and 23d, and owing, as I thought, to the seed laying too long in the hot sun after being soaked, before it was planted, did not come up scarcely one hill in a row: we replanted on the 2d and 3d June, which came up well.

In consequence of the late planting and the unfavorable season, I long since abandoned the idea of obtaining more than a common crop. It however, grew well; we gave it two good dressings with the cultivator and hand hoe. On the 6th Sept., we had a frost that checked its growth, and on the nights of the 12th and 13th Sept., were killing frosts; while it appeared to be in full bloom on the 14th, we cut it all up by the roots and placed it in small stocks, where it remained until about the middle October, when we husked it out, taking care to keep the one-fourth acre first planted by itself. We husked in large baskets holding little more than a bushel. We took from the quarter acre, 48 baskets, one of which we spread on the shelves in the milk house, where we kept a fire in a stove, and left it about ten days, then shelled it out, and got 17 quarts 1 pint shelled corn, giving 26 bushels 8 quarts or 105 bushels to the acre. The other three-fourths did not do as well, but taking it together, we got 94 bushels and 2-quarts shelled corn. I would not wish it understood from the above, that I am in favor of late planting, by no means. I am decidedly in favor of early planting, (weather and land permitting.) I would never leave it later than 10th May. Urgent business calling me from home, was the cause of my late planting at this time.

Potatoes.—My potato ground was prepared the same as for the corn, and planted the first and second days of June—furrows three feet apart one way, seed all whole and large, put down one in a place, one foot apart; we gave them one good dressing with the plough and hand hoe, which was all that was done to them until harvesting.—About one quarter was planted with the pink-eye, the rest with the orange potato. We took up 519½ baskets weighing each 69 lbs. A fair measured bushel potatoes weighs 64 lbs; by this standard we got 500 bushels as fine potatoes probably, as is often taken out the ground. The orange yielded about a per cent more than the pink-eye. In no part of my farm did potatoes yield as much by one quarter, as they did the preceding year; I do not, therefore, consider the yield of 560 bushels to the acre, by any means a large one.

Ruta Baga.—The ground planted was barely sufficient to give a fair trial, less than half an acre, part of it on sward, and part on ground where potatoes were raised last year. Those where potatoes grew the preceding year, were the best. I measured from one end of the patch, twenty square rods, from which we got 154½ bushels, or 1,236 bushels to the acre, 55 lbs. to the bushel.—The ground was ploughed but once, threw into

ridges about three feet apart, a man sent ahead with a hoe to level the tops of the ridges, following myself with a tin canister with two small holes in it, with the seed in. (And here, in justice, I must acknowledge the receipt of the simple idea obtained from the Cultivator, in a communication in the May number of this year, from William R. Smith, of Macedon, which I consider of more value to me, than many years subscription to the Cultivator.) This canister I shook over the ridge, passing nearly on a common walk; a boy following with a garden rake, to cover the seed, and it was done. The seed came up well—required a little thinning in some places, and filling up in others. I consider the ruta бага a crop which every farmer should raise, particularly the poor man, who keeps but one cow, and hires a tene-ment, with but one acre of land. Let him set off one quarter of an acre, and plant it with ruta бага; with proper treatment, this would furnish his table, nearly the year round with an excellent vegetable, and with the aid of a few bundles of straw, winter his cow better than she could be wintered on hay. Mine were planted 7th of June, which in our latitude I think is not too early. I will endeavor to make as near an estimate of the expense of the cultivation as I can, commencing with the corn.

		Dr.
Ploughing, harrowing and furrowing 1½ days		
at 16 shillings per day,	3 00	
Planting, 4 days' work, at 6s per day,	3 00	
Drawing on 40 loads of manure, at 20 cts.,	3 00	
First dressing with cultivator, ½ day,	1 00	
6 days' work hoeing first time,	4 50	
6 days' work second dressing,	4 50	
½ day with the cultivator,	1 00	
Seed, one dollar, interest on cost of land,		
\$3.50,	4 50	
		\$29 50

		Cr.
By 94 bushels corn, at 6s,	\$70 50	
Expenses,	29 50	
		\$41 00
Profit,		\$14 00

I have not taken into calculation the expense of harvesting, considering the fodder to be ample pay.

		Dr.
POTATOES.		
Ploughing, harrowing and furrowing,	3 00	
Planting, 4 days' work, at 6s per day,	3 00	
Ploughing 1 day,	2 00	
Hoeing 4 days, at 6s,	3 00	
Digging and housing 560 bushels, at \$3		
per hundred bushels,	16 80	
Interest on cost of land,	3 50	
35 bushels seed, at 2s. is	8 75	
Drawing on 40 loads manure, at 20 cts.	8 00	
		\$48 05
		Cr.
By 560 bushels, at 20 cents,	\$112 00	
Expense of cultivating, &c.	48 05	
		\$63 95

		Dr.
RUTA BAGA.		
Ploughing, harrowing and ridging,	\$3 00	
Putting in the seed, 2 days' work,	1 50	

2 days' dressing through with the cultivator,	2 00
First thinning and hoeing, 8 days, at 6s.	6 00
Second do. 8 days,	6 00
1 lb. seed, 8s.	1 00
Interest for cost of land,	3 50
	\$23 00
	Cr.
By 1,236 bushels, at 20 cents,	\$247 20
Expenses of cultivating, &c.	23 00
Profit,	\$224 20

The tops will pay for harvesting.

I am fully of opinion that any land that will grow 50 bushels Indian corn to the acre, will grow 500 of potatoes, or 1000 of ruta baga.

Yours, very respectfully,

J. W. BREWSTER.

N. B. The soil on which the above crops were grown, was a dark loam with a small mixture of clay, a hard pan underneath, say ten or twelve inches from the surface, and has by the oldest and most experienced farmers in the neighborhood been considered entirely unfit for the growth of Indian corn.

[From the Mechanic and Farmer.]

MANGEL WURTZEL.

This root is of later introduction into the United States than the Ruta Baga, and like that, was 'frowned indignantly upon,' by all such farmers as are opposed to innovations and 'book larnin.'—Intelligent men, who did not believe that agriculture had quite reached its zenith among us, gave it a fair trial, and soon become satisfied of its value for feeding stock. The question is not yet fully decided among us whether this root or the Ruta Baga is most valuable. One thing is certain, and that is, that it has more choice of location and requires nicer cultivation than the turnip, and for this reason, perhaps, it is not as yet so much used as that is. With a proper soil and suitable cultivation, the yield is great—almost too great for those to believe, who think 200 bushels of potatoes a good crop.

The subjoined statement of crops and their value as food for animals, may not be uninteresting to those farmers among us who begin to rub their eyes to let in a little light on the subject to which they are now should have been wide awake.

Col. Powell raised in the year — on one acre and 14 perches, 1,634 bushels; and a part of the same field produced at the rate of 2034 bushels to the acre—weighing 44 tons, 4 cwt. and 16 lbs.

The premium crop of Messrs. Little, 3½ tons, 10 cwt. and 16 lbs. The premium crop of Mr. —, of Charlestown, Mass., two years ago, 1545 bushels. Here is a sample of what has been done out of our State, and there is little doubt the public might be in possession of the amount of as large crops, on a small scale, in the 'cold and barren State of Maine.' If there was not such an indifference to make public the experiments and accounts of crops among us.

Having grown them for several years on a small scale, I have no doubt about the product. The present season I planted a small patch of 608 feet and gathered from it 20 baskets, weighing each 61 lbs., making at the rate of 85,000 lbs. to the

acre. I did not think my crop any thing extraordinary, because I have seen a patch on the premises of Mr. Glazier, in Hallowel, where the average size of the roots was at least 50 per cent larger than mine. Should any of the Trustees of the Penobscot Agricultural Society be incredulous about their growth here, of \$10 for 20,000 lbs. on one-fourth of an acre, and if the season is good, it shall be taken.

Col. Powell observes—'My neat cattle prefer Mangel wurtzel to any roots which I have offered them. I have found its effects in producing large secretions of good milk, very great. I selected, in November, two heifers of the same breed, and very nearly of the same age, and in similar condition. They were fed in adjoining stalls, and have been fed regularly three times a day, by the same man. One of them had three pecks mangel wurtzel and four quarts corn meal daily; the other, four and a half pecks of mangel wurtzel. The last, which has had mangel wurtzel alone, is in the condition of good beef; the other is not more than what graziers call half fat.'

Messrs. Little says—'From a number of years' experience we think them a valuable addition and highly worth cultivation. Compared with English hay, in our opinion three tons are equal to one of hay for feeding stock generally; but for milch cows, I think two tons of equal value. For feeding store swine the mangel wurtzel is the only root we can cultivate and feed to profit.'

I have in this paper said nothing of the mode of cultivation. Should any of your readers be disposed to try the cultivation and wish for any information in regard to it, let him say so *through the press*, for I am anxious to have some one beside myself and your friend "Mum," make a communication to the Mechanic & Farmer, on the subject of agriculture.

JOHN BARSLOW.

Mt. Hope, Nov. 30, 1835.

THE POTATO.

[By the Conductor of the Albany, N. Y. Cultivator.]

There is nothing peculiar in raising the potato from seed, more than any other plant. The quality of the offspring will, like that of all animals and vegetables, partake of the character of its parents. Of course the seed should be selected from the best varieties, as we shall be then sure of breeding from one good stock. It may be separated from the pulp of the ball and dried, or the balls may be broken and dried, to be sown in the spring. They should be kept from frost and moisture. At the usual planting time prepare a bed of good mould, and sow the seeds thinly on it in drills 18 inches apart. Nurse the plants as you would a bed of onions; and in autumn take up and preserve the small tubers of each plant separate. Plant the second year at the distance of 19 inches or two feet each way, nurse as before, and you will be able to judge from the product, and their time of ripening, of their character and quality. Plant your selected kinds a third year, and the crop will be fit for market or stock. The superiority which our correspondent discovers in 'old country' potatoes is not wholly owing to new varieties, but to climate. In our country we think the potato deteriorates south of latitude 41, and perhaps the best potato zone may be com-

prised between latitudes 41 and 46 deg. north. The latitude of Britain is still farther north, though its climate is more temperate than ours. In our latitude, in ordinary seasons, the best potatoes are grown on grounds that are deemed cold, as reclaimed swamps, &c. The best potatoes are grown in Ireland, Lancashire, Eng., in Nova Scotia, Maine, &c. where the temperature is comparatively cool, and at the same time very humid. The duration of a variety, in perfection, is generally computed at from 14 to 20 years, though this period is sometimes prolonged by a change of soil or climate. The nutritious properties of the potato have been proved to vary from 14 to 28 per cent. in different species. Those abounding most in nutriment are invariably the best, not only for the table, but for farm stock; but they seldom if ever exceed a medium size, and are less productive than coarse kinds. Hence as buyers make little or no distinction, the grower finds it most profitable to raise the latter.

[From the Ohio Farmer.]

APPLES GOOD FOR HOGS.

S. Medary, Esq.—The frequent communications contained in the Ohio Farmer, recommending apples for hogs, induced me to try the experiment. Accordingly, about the first of September, I turned my hogs (about fifty in number) into a small orchard of perhaps about thirty trees, pretty well loaded with apples, and a considerable number on the ground; intending as soon as they would pick up those that were on the ground, if they did not seem to receive much benefit from them, to turn them out, and commence feeding corn. After they had been in a few days, a man that was working on the farm said to me, I think you had better turn your hogs out of the orchard, for the apples are doing them no good. They will only make their teeth sore so that they can not eat corn. But said I to him, never mind, let us try them in a while longer. The apples fell about as fast as the hogs could use them, and in the course of two weeks I think I never saw hogs fatten faster in my life. Some time in the last week in September, I took them out of the orchard, and turned them in to corn, and they are now fatter than any hogs in the neighborhood, that had plenty of corn even before mine were turned in to apples. I would recommend to every farmer that has apples to sell, to feed them to his hogs rather than take twelve and a half cents per bushel for them, (as some of the farmers in this neighborhood have been doing,) or even twenty-five cents.

A YOUNG FARMER.

Red Oak, Oct. 20. 1835.

The foregoing is further evidence of the importance of an orchard to the farmer. How long will farmers continue to live in ignorance, and suffer their property to waste on their hands for the want of knowledge to know how to use it—At a time like this, when every bushel of grain is of value, and the wants of the country demanding it, how important it is that the farmer should know the value of other articles upon his farm; which in seasons like the present, are generally let go to waste. But there is an awakening sense of the importance of knowledge starting up in the

country, which must soon produce a new order of things.

A "Young Farmer" was right in his course of feeding. Had he fed corn first, and then apples, the very reverse might have been the case. The feeding of the apples would have been attended with no good result, but otherwise. When animals are to be fattened by a change of food, the great secret depends on the kinds to be fed first.

As a further proof of the propriety and advantage of feeding apples, not to hogs only, but to other animals of the farm, we give the words, as nearly as we can, of a Hamilton county farmer, a short time since, in a conversation with us. He wished it made public.

"Having heard," said he, "that apples had been fed with advantage to horses, I concluded to try the experiment, through the time of seeding in September last, when my horses were every day kept closely at work. I commenced giving them apples regularly at feeding times, instead of grain, and at nights they were turned into pasture. They had not a feed of grain during the whole time, and I seeded largely. When I was through, my horses looked better, and were in better spirits than I ever saw them before at the close of seeding time." He is a man of veracity, and could have had no interest in exaggeration.

ACCOUNT OF THE SHAKERS.

*Communicated by the Rev. HENRY COLMAN,
To the New York Farmer.*

PATTERN FARMING.—The nearest approach to what may properly be denominated pattern farming, as far as my observation extends, is to be found among the Shakers. With two of these establishments I have been somewhat familiar; one at Canterbury, N. H., and one at Hancock, Mass. To a mind pleased with the most exemplary industry, sobriety, good order, neatness and exactness, nothing can be more gratifying. Of their religion I shall say nothing, further than to remark that there must be some good in a religion from which so many good fruits arise. Every man's religion, except so far as he may injure his neighbour's peace, or disturb the public tranquillity, is, in my humble opinion, an affair entirely and exclusively his own; and on the same grounds, on which I claim freedom for myself, I am entirely satisfied, that these upright and peaceable communities should enjoy their liberty. But their industry, economy, neatness, and good management are no where exceeded, and are above all praise.

The farm, occupied by the community at Canterbury, comprehends two thousand acres in one body, and five hundred in outlands. It is situated on a high and broad hill; and the buildings, which are remarkably neat and commodious, are visible at a considerable distance. The public road runs through the centre of the farm; the lots are well divided by good and substantial fences; the gates are neatly painted, and the roads kept in the finest condition. Their first object appears to be to raise for themselves a comfortable, I had almost said, a luxurious subsistence; and beyond that the surplus is sold either in a raw or manufactured form. Their grass fields are perfectly clean; not a stone, nor a stump is left standing, nor a weed is suffered to grow by the wall side. The

land here is of an inferior character by nature; cold, gravelly, and clayey, and hard to work; but cultivation perseveringly and judiciously applied, have rendered it comparatively rich and productive. I was curious to come at the amount of crops by some better authority than by conjecture; and one of the principal Trustees was kind enough to communicate some facts, which I deem instructive.

From a piece of grass land of twelve acres near the principal dwellings, they usually, and upon an average, obtain twenty-eight tons of hay per year; and in one year they obtained, accurately ascertained, thirty-eight tons of good English hay. This land has been forty years uninterruptedly in grass; it is measured regularly and copiously every second year, and a spike roller is used upon it with great advantage in the spring. Their crop of oats this year, upon ten acres, averaged sixty bushels to the acre; and they spoke with approbation of the Tartarian, or as some call it, the one-sided or horse-mane oat. They have been many years in the use of the revolving horse rake, which they make with admirable neatness, pointing all the teeth with iron; and for the sake of cleaning the field after the horse rake, they use a hand rake, the head of which is about five feet long, and which is made fast to the handle by two long iron rods. Where the grass is thin this rake is easily managed by one man, and a great deal of work is done by it.

Their pig-stye is well worth a visit for the neatness, yes, the neatness of a pig-stye! and the admirable and happy condition of its tenants. Twenty or thirty swine in clean swept styes, whose average weight at killing time will be between four and five hundred pounds, is a sight which Parson Trullive, in Joseph Andrews, would have looked upon with ecstasy. The whole care of the swine in one building devolves upon one man, whose feeding tubs, and pails, and dippers, and cloths, and brooms, were as exactly arranged as in any lady's kitchen. The troughs are projected in front of the styes, and are closed by a swinging cover. When they are to be fed, this cover is bolted down to the inner side of the trough, so that it may be cleaned, and the food put in without any interference from the hungry expectants, who are not suffered to come to the table until every thing is ready; when the swinging cover is raised and bolted to the outer edge of the trough, to which they then have ready access. I hope I have made this arrangement intelligible, as it is decidedly the most convenient I have ever seen. Intimacy commonly produces attachment; and I was curious to know of the respectable old man, who took care, if he did not become fond of them, and feel some reluctance to having them killed. Nay! nay! says he, from which I was compelled to infer that the poor hog is actually beyond the pale of human sympathies. Why is this? have they no virtues? if they have, they remain to be developed; have they no moral sense? it seems to me nothing which approaches to it; in this respect they appear to stand almost at the lowest round of the ladder in the animal creation; and last of all, whether they have virtues or moral sentiment or not, they certainly, to use the current Yankee phrase, "they certainly have no manners." This seems to exclude them from all courtesy, and to shut up even the compassions of

a "Friend" towards them. I have only to add that the food is always cooked, and that the Shakers consider a portion of rye mixed with corn as very much improving their food. Their experience leads them to the conclusion that they would prefer to buy rye at a quarter of a dollar more a bushel than corn, to mix with corn in equal parts, than to give their swine Indian meal alone.

Their dairy is extensive, and in its interior arrangement is most admirable for its order and neatness. Their butter was very superior, and their cheese, I am told by those who can judge of it, equally to be recommended. A little contrivance for turning their cheeses, which I cannot, I fear, describe so as to render intelligible, but by which the board on which the cheese is placed is suddenly inverted by a spring, was ingenious, and made it easy to manage the largest cheeses. I visited at milking, one of their yards of forty or fifty cows, whose appearance and product were good. In this part of the country, the season has been universally unfavorable to dairy products. A few years since, they obtained an improved Durham short-horn bull, reputed of pure blood, and a descendant of Admiral; and a large proportion of their cows are half-blood of his stock; but the cross has not been attended with any particular advantage in respect to milk.

They have various contrivances for facilitating labor; among others, by means of a windlass, a swinging beam, and some large iron hooks, they are able to take a load of hay from the cart at one lift, and deposit it in the mow. Their situation afforded no natural water power; but by the erection of a dam between two hills, and turning several springs, they have formed an artificial reservoir or head of water, which affords a supply for all their purposes; and this water is used six times before it reaches the foot of the hill. They have on the stream a threshing mill, saw mill, corn mill, bark mill, and other works. Their threshing machine is of their own invention, and has evidently furnished the model of many of the machines for which patents have been taken out.

They have a very fine vegetable garden, and raise a great amount of seeds for sale, and likewise a botanical and medicinal garden; and dry and press great quantities of culinary and medicinal herbs, which are disposed of in different parts of the country to advantage. These establishments are also managed with exemplary care. Their flock of sheep is comparatively small, chiefly of the pure and mixed Merino. The yield of wool is over four pounds, but it is not washed upon the sheep's back, as they deem it injurious to the sheep. They have a small flock of Dishley or Bakewell sheep, which they are inclined to dispose of, as they consider them as less hardy, and not so profitable for their purposes as the Merino. I give these opinions of theirs, which perhaps are mere prejudices, without comment.

The Shakers' village at Hancock and Pittsfield, Mass., is a smaller village than that at Canterbury; and their operations are chiefly confined to providing for the subsistence of the family, to some few manufactures, and to the raising of garden seeds. In point of soil, the location is not very eligible; but there are throughout the whole establishment the same order and neatness, the same admirable and ingenious use of all the means and powers for facilitating labor that come

within their reach; and the same general indications of industry and good management, which appear in the former case. The great object of agricultural curiosity at Hancock, is their magnificent stone barn, two stories in height and ninety six feet in diameter. The great mow is in the centre, and is said to be capable of containing between three and four hundred tons of hay. The floor or driveway is on the outside of the circle, and the team goes round and comes out at the same door at which it enters. Several teams can stand on the floor and be unloaded at the same time. In the centre of this mow a large post or mast is erected, reaching from the ground to the roof. At the apex of the roof is a small cupola like those usual on distilleries. Around this post, slats or strips of plank are placed at a small distance from it, to prevent the hay from coming in immediate contact, and the hay at the bottom being raised by an open frame from the ground, a perfect ventilation is formed, and the steam from the new hay is in this way effectually carried off.

Upon the whole, it is hardly possible for an observing man to visit these establishments without the highest gratification. They have very great advantages in the amount of labor, which they are able to apply to any purpose, which they design to accomplish; and this labor is a most valuable capital, though they are not wanting in pecuniary resources, their honest gains being carefully secured and managed. But they are at the same time entitled to the highest praise for their good conduct and good management. Their farms are literally pattern farms; models of careful, frugal, judicious, exact, neat, profitable husbandry. They are an exemplary and useful community; just in their dealings; peaceful and orderly in their deportment; wishing well to all men. They contribute their full share in bearing the public charges; and at the same time they throw no burdens whatever upon the public purse, and ask no favors of the public beyond simple protection. That there are some hypocrites or knaves among them, is very probable; for what community is without its corrupt mixture? but it is highly to their honor that no general charge of this nature has ever been substantiated; and that the general character of the Society for honor, purity, truth and justice, strong as has been the tide of prejudice and superstition against which they have had to contend, has remained unimpeachable. The disciples of Malthus, and the benevolent political economists of the present day, could nowhere expect to see in more perfect operation the great moral preventive check. To be sure, on the principles of the Shakers, the world must soon become a solitude; but there are counteracting influences in human nature amply sufficient to save us from all apprehensions of any such disastrous results. The population of the world will go on, and if, with its increase, happiness and improvement will be extended, so also must poverty, misery, and vice prevail. This peaceful community will present a refuge to many, wearied and disheartened with the cares and perplexities of life; will afford a favorable opportunity to other anxious and sensitive minds to cultivate, perhaps under very mistaken, though honest views, an extraordinary virtue, and a purity more than earthly; will open its welcome doors to many a friendless and houseless being, many a

desolate and heart broken widow; and throw its protecting wing over many a fatherless child, and train him to habits of industry, sobriety, self-government, and moral purity. In all their good deeds and intentions, may the blessing of Heaven rest upon them. Whether they can sustain themselves amidst the expanding and brightening light and the continual and extraordinary changes of society, time only can disclose. Their extinction, to say the least, would be the loss of one of the best examples of general sobriety, industry, harmony, good order, and equity, which can be found in the world. But I fear I may have travelled too far out of the record. I had designed to speak of them only as an agricultural community; and as such their management is in every respect an admirable pattern. H. C.

Meadowbanks, Oct. 15, 1835.

MANUAL LABOR AND MENTAL CULTIVATION.

'My conviction—not lightly taken up, but the result of long and earnest thought—is, that daily occupation with manual labor is in no way incompatible with the highest mental cultivation and refinement; that so far from the exercise of mechanical employment daily, for a moderate time, being detrimental to the mental powers, it has on the contrary, a decided tendency to strengthen them; and that if those who at present serve the public in the capacity of writers were to employ several hours a day in mechanical labor, their bodily health would be improved, and their writings would take a character of vigor, startling even to themselves. They would find the workshop a more healthy atmosphere than the drawing room. There is no reason, save ignorance, why any thing like degradation should attach to the character of the working mechanics. There is no reason save ignorance why they should not have dwellings as good as their employers, as to all the purposes of comfort. There is no reason, save ignorance, why they should not have abundance of good and well prepared food for the body, and access to books of all kinds for the proper culture of the mind. There is no reason, save ignorance, why they should not have access to lectures of all kinds, and picture and sculpture galleries, and museums, far more imposing than any thing the world has yet beheld. There is no reason save ignorance, why the great body of the working people should not possess, in addition to all that is necessary for the comfortable maintenance of the body, all the pleasures of mental refinement, which are now only within the grasp of the very rich. There is no reason, save ignorance, why the ruling power of the state should not be in their own hands, and all else, save only the excitements of ostentation and expensive sensuality.'—*Tail's Magazine.*

SILK SOCIETY.

A public meeting of the citizens of Montgomery county, favorable to the formation of a silk society, to be denominated the "Silk Society of Montgomery county," is advertised to take place on Monday next, the 17th inst. at 2 o'clock, at the house of John Brauch, in the borough of Norristown. We are gratified to see, that the silk culture is becoming a subject of serious consideration among the farmers of this and the adjoining counties; and well it may, for we believe that

ere long it will be found to be one of the most profitable pursuits of the farmer. In several of the New England states, it has already invited the attention of the capitalist, and the agriculturist generally, many of whom have found that the profits afford a handsome compensation for the labor bestowed. The establishment of large silk factories there, has produced such a demand for the raw material, as to leave it already, only half supplied.

The attention of our farmers to a subject of so much importance, cannot be too earnestly invited; and we feel assured that it will require but little stimulus to induce them to a trial of this important branch of congenial business.—*Germanstown Telegraph.*

CINCINNATI AND CHARLESTON RAIL-ROAD.

A great rail road meeting was held at Columbia, S. C. on the 4th ult. at which Gov. McDuffie presided, and at which it was resolved to hold a general convention at this place on the 4th of July next, to confer with delegates from all the states interested, in relation to the contemplated rail road from Cincinnati to Charleston, and Robert Y. Hayne, John C. Calhoun, Abram Blanding, Bayless J. Earle, A. P. Butler, and Wm. M. Willie were appointed as delegates to said Convention. We most cordially second this resolution of our S. Carolina friends, and on behalf of our state would most pressing invite our fellow-citizens of Cincinnati, of Kentucky, of North Carolina, and of Georgia, who may feel an interest in this great work, to send delegates to the proposed convention. In the meantime we hope our enlightened and patriotic Legislature will, before the convention meets, have granted us a charter and provided the necessary funds for accomplishing the improvement, so that so far as our state is concerned, there may be no contingency to defeat or paralyze our conference or co-operation with our sister states. We hope also that East Tennessee may have a full representation at this convention. All our counties are deeply and vitally interested, no matter whether the road be located through them or not. Let it cross our valleys where it may, we should all feel an interest in the prosecution of this grand improvement.—*Knoxville Register.*

THE OSIER WILLOW.

The Osier Willow is worthy a place on every farm, because it takes up but little ground, requires very little care, and furnishes the best materials for baskets, which are indispensable to the farmer. This, like all the willows, is readily propagated by cuttings. Where it has taken good root, its shoots, in good ground, grow from four to eight feet in a season. These shoots should be taken off every winter, unless very large willows are wanted, and the number is thereby increased. The art of fabricating baskets from them is easily acquired, and may be practised in evenings and stormy days in the winter without cost. For ordinary baskets the osier is used with the bark on; but for neat house baskets they are peeled. The best way to divest them of the bark is to cut, sort and tie the osiers in small bundles, say early in March, and place the bundles in a pool of stagnant water; and at the season the leaf buds are bursting, the bark will readily strip off. The

osiers may then be laid up, to be used when leisure will permit. A well made osier basket is worth three or four made of splits. We have them which have been in wear for years, and are yet good. To give them firmness and durability, a good rim and ribs of oak, hickory or other substantial wood, are necessary.—*Silk Cul.*

SHEEP—It is a well known fact that wool growers in this section of the country, whose flocks exceed 200 sheep, lose a large number of their sheep each winter. Some of them, we will allow, die with old age; but too many of them do not live more than two years. There is a remedy for this loss of property, and that too directly in the hands of the shepherd. This being the case, I am anxious to lay it before the public, that all may profit by it hereafter.

It is a custom among many farmers when they drive in their flocks in the fall to put the whole flock together in a single barn, shed or whatever place they may happen to have to keep them in. Now it is very evident that the young, the old and weakly, or in other words the most unhealthy of the flock, cannot possibly fare equally well with the rugged; and it is a fact, while the one is thriving the other is losing its strength. When kept in this situation, one after another falls from hunger, and other causes incident to this state of affairs, and they are no longer able to raise themselves. Here the shepherd for the first time separates the almost lifeless sheep from the multitude, and endeavors to restore it to health. But it is too late. He is soon convinced that 'a stitch in time saves nine,'—that ten thousand dying sheep are worth no more than the wool on their backs.

When sheep are brought from the pastures, in the fall, they should be divided into four distinct flocks, viz :—

First.—Meagre or sickly; which should be kept in a warm barn, with but few in a pen.

They should have salt as often as once a week; should have a handful of corn each day through the winter; as much hay as they can eat through the day, and should be watered as often as twice a day. This will not fail to keep them in good order.

Second.—The ewes also should be kept from the rest of the flock, should receive the same treatment, with the exception of the grain, which may be given occasionally, though it is not necessary.

Third.—The Bucks, intended for the benefit of the flock, should be kept by themselves, that they may be kept in good order, and for another reason that will suggest itself to all wool growers.

Fourth.—And last of all, the Wethers, which may be, if healthy, kept entirely on hay and water.

I have for twelve years kept a large flock of sheep, and have lost a great many; but since 1830 I have adopted this course, and have not lost one tenth as many as I did in the same number of years preceding that time.—*Claremont Eagle.*

TERMS OF THIS PAPER.
Price five dollars per annum, payable in advance. When this is done, 50 cents worth of any kind of seeds on hand will be delivered or sent to the order of the subscriber with his receipt.

A woman's hand traced the following lines, which only woman's true and fond heart could have inspired. We hope we may receive other such gems.

[From the New York American.]

THE WIFE'S PRAYER.

The young wife kneeling to her God,
Seems brighter far in this lone scene,
Than when our halls of mirth she trod;
'Mid Fashion's throng, a worshipp'd queen!

Gaze on—the love that fills her heart
New charms hath lent to cheek and brow;
Gaze on—but hush! the pure lips part,
Perchance for *thee* she's pleading now:

"Hear me thou who mark'st each feeling,
Thou who know'st each passion's sway,
At thy sacred altar kneeling
For a being loved I pray!

He is dearer than the mother
Who hath been my life's fond guide—
He is 'dearer than a brother,'
Though a brother's still my pride.

Oft ere summer's bloom had perish'd
For the *lover's* weal I plead—
Father! on the *husband* cherish'd,
Now thy choicest blessing's shed!

In all 'peril and temptation'
Guard him with thy holy might:
'Mid the charms of power and station,
Keep a noble spirit bright.

Bless him; Father! he is starting
Proudly for the goal of fame—
Oh! may every year departing
Add fresh laurels to his name!

Grant him genius' inspiration—
Wisdom's eloquence divine—
He is pledged unto a nation,
Let him in her councils shine.

Be his guide—and for earth's sorrow,
For the blight, the cloud, the thorn,
So prepare him, that each morrow
On a fearless heart may dawn.

Father! if the love I bear him
Lend his path a brighter ray;
If that love one pang can spare him,
Aid me still to cheer his way.

Should his manhood's prime be shaded,
Let him on this heart repose—
It will prove when joys are faded
Desert spring and forest rose.

Strengthen, guard and guide him ever!
May he glory in love's chain,
Till its links thy angel sever,
Ne'er on earth to clasp again."

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A happy New-Year—Notice of the Shakers—Lime—Burning surface soil and clay—Filling up Gullies—Work for January—Cincinnati and Charleston rail-road; report of R. Y. Hayne—Culture of Corn, Potatoes and Ruta Baga—Mangel Wurtzel—the Potato—Apples good for hogs—Account of the Shakers—Silk Society—Cincinnati and Charleston rail-road convention—the Osier Willow—Sheep—Terms of this paper—Poetry; the Wife's prayer—Prices Current—Advertisements.

WHITE ITALIAN MULBERRY SEED.

THE subscriber has on hand a supply of *White Italian Mulberry Seed*, of the growth of the last season, which he offers for sale on pleasing terms. This seed is warranted not only to be *fresh*, but to be *pure*, having been raised with great care by a distinguished cultivator. Agriculturists at a distance would have a fine chance of obtaining supplies through their representatives in Congress, and the subscriber takes this method of apprising them of the opportunity thus presented. All orders, post paid, will be promptly attended to, if addressed to
ROBERT SINCLAIR, Jr.
Seedsman, at the Maryland Agricultural Repository,
Light near Pratt street, Baltimore.

jan 5
noy 24

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,	bushel.	2 50	—
CATTLE, on the hoof,	100lbs.	5 00	6 00
CORN, yellow,	bushel.	new	70a73
White,	"	do	68a70
COTTON, Virginia,	pound.	18½	—
North Carolina,	"	—	—
Upland,	"	18½	20
FEATHERS,	pound.	37	40
FLAXSEED,	bushel.	1 25	1 37½
FLOUR&MEAL—Best wh. wh't fam.	barrel.	8 00	8 50
Do. do. baker's.....	"	7 50	8 00
Do. do. Superfine,....	"	7 25	—
SuperHow. st. in good de'd	"	7 00	—
" wagon price,	"	6 75	—
City Mills, extra,.....	"	6 75	7 00
Do.	"	6 75	6 87
Susquehanna, firm&scarce	"	6 75	6 87
Rye,.....	"	5 00	5 25
Kiln-dried Meal, in hhds.	hhd.	19 50	20 00
do. in bbls.	bbl.	4 37	4 50
GRASS SEEDS, red Clover,	bushel.	5 00	5 75
Timothy(herds of the north)	"	2 75	3 25
Orchard,	"	2 25	3 00
Tall meadow Oat,	"	2 00	2 50
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.	—	15 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
HOES, on the hoof,	100lb.	7 00	7 50
Slaughtered,	"	7 00	7 50
HOPS—first sort,	pound.	12½	—
second,	"	10	—
refuse,	"	8	—
LIME,	bushel.	33	35
MUSTARD SEED, Domestic,	"	5 00	6 00
OATS,	"	42	45
PEAS, red eye,	bushel.	—	—
Black eye,	"	—	1 25
Lady,	"	—	—
PLASTER PARIS, in the stone,	ton.	—	3 50
Ground,	barrel.	1 25	—
PALMA CHRISTA BEAN,	bushel.	2 00	—
RAGS,	pound.	3	4
RYE,	bushel.	88	90
Susquehannah,	"	none	—
TOBACCO, crop, common,	100 lbs	5 00	5 50
" brown and red,...	"	5 00	7 00
" fine red,	"	7 00	9 00
" wrappery, suitable	"	—	—
for segars,	"	5 00	10 00
" yellow and red,...	"	6 00	8 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality, ..	"	4 75	5 00
ground leaf,	"	5 00	8 00
Virginia,	"	6 00	—
Rappahannock,	"	—	—
Kentucky,	"	8 00	14 00
WHEAT, white,	bushel.	1 40	1 45
Red,	"	1 35	1 40
WHISKEY, 1st pf. in bbls.....	gallon.	37	37½
" in hhds.....	"	33½	—
" wagon price,	"	30	bbls.
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 50	—
To Wheeling,	"	1 75	—
WOOL, Prime & Saxon Fleeces,...	pound.	55 to 63	30 to 32
Full Merino,	"	48	53 28 30
Three fourths Merino,	"	45	48 26 28
One half do.....	"	40	45 24 26
Common & one fourth Meri.	"	36	40 22 24
Pulled,	"	38	40 23 24

2,000 MORUS MULTICAULIS.

FOR SALE by R. Sinclair, Senr., at Clairmont Nursery, 2,000 Morus Multicaulis trees (the Chinese Mulberry.) These trees are between 7 and 8 feet high, and if planted out this fall might be fed from to advantage next spring. Persons desirous of purchasing, would do well to make early application. Their superiority for feeding silk worms is universally admitted.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured....	pound.	11	—
Shoulders,.... do.....	"	10	—
Middlers,.... do.....	"	8½	9
Assorted, country,....	"	7	8
BUTTER, printed, in lbs. & half lbs.	"	18½	25
Roll,.....	"	20	—
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old....	each.	3 00	6 00
Cows, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 75	1 81
CHOP RYE,.....	"	1 81	1 87
Eggs,.....	dozen.	—	—
FISH, Shad, No. 1, Susquehanna,.....	barrel.	7 75	—
No. 2,.....	"	6 75	—
Herrings, salted, No. 1,.....	"	4 00	4 12½
Mackerel, No. 3,.....	"	5 75	—
Cod, salted,.....	cwt.	3 00	35 0
LARD,.....	pound.	10	10

BANK NTOE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	VIRGINIA.
U. S. Bank,.....par	Farmers Bank of Virginia 2½
Branch at Baltimore,....do	Bank of Virginia,.....do
Other Branches,.....do	Branch at Fredericksburg do
MARYLAND.	Petersburg,.....do
Banks in Baltimore,....par	Norfolk,.....do
Hagerstown,....do	Winchester,.....do
Frederick,.....do	Lynchburg,.....do
Westminster,.....do	Danville,.....do
Farmers' Bank of Mary'd, do	Bank of the Valley,....do
Do. payable at Easton,....do	Branch at Romney,....½
Salisbury,.... 5 per ct. dis.	Do. Charlestown,....do
Cumberland,....do	Do. Leesburg,....do
Millington,....do	Wheeling Banks,....1½a2
DISTRICT.	Ohio Banks, generally 2½a3
Washington, } Banks, ½.	New Jersey Banks gen. 1½a2
Georgetown, } Banks, ½.	New York City,....½a3
Alexandria, } Banks, ½.	Massachusetts,....2a2½
PENNSYLVANIA.	Connecticut,....2a2½
Philadelphia,....½a	New Hampshire,....2a2½
Chambersburg,....½a	Maine,.....2a2½
Gettysburg,....do	Rhode Island,....2a2½
Pittsburg,....1½a2	North Carolina,....2½a3
York,.....½a	South Carolina,....2½a3
Other Pennsylvania Bks. 1½a2	Georgia,.....3a3½
Delaware [under \$5]....3a4	New Orleans,.....4
Do. [over 5]....½a½	
Michigan Banks,....5a	
Canadian do.....5a	

WHITE TURKEYS.

A few pair of White Turkeys would be purchased at the Agricultural Repository in Light near Pratt street, by
de 29
ROBERT SINCLAIR JR.
3t.

SAXONY RAMS.

The editor of the Farmer and Gardener has for sale 2 full blooded Saxony RAMS, and 2 ¾ blooded do. These sheep are of a family remarkable for their fine fleece, their wool always commanding the best prices in the market.

ALSO

The bull *Brilliant*, a large sized animal of the Improved Durham Short-horn breed. He is red and white; was got in England, and calved in Frederick county, Md., on the 12th May 1829. His dam was Matchless, got by Favorite, (purchased at the sale of the late R. Colling, a celebrated breeder) son of Favorite, dam by H. Allison's Gray bull, sire Orlando, that died on the passage from Liverpool, out of Rosina, from Yorkshire, that gained the highest prize premium of ten sovereigns at a Cattle show in Manchester, England.
no 3

FOR SALE ON MODERATE TERMS.

THE editor of the Farmer and Gardener has for sale two most beautiful Devonshire Bulls, rising three years of age each, of pure and celebrated blood. Also, one Bull 4 years old, a cross between a full bred Durham bull and a pure Devon cow. This noble animal combines in a remarkable degree the good points of both breeds. To gentlemen of the south who may desire to improve their stocks of cattle, the present is an opportunity rarely to be met with. All letters to the editor upon the subject must be post paid.
de 29

THE SALMAGUNDI,

AND NEWS OF THE DAY.

Embellished with a multitude of Comic Engravings. A new periodical, of a novel character, bearing the above appellation, will be commenced on the beginning of January, 1836. While it will furnish its patrons with the leading features of the news of the day, its principal object will be to serve up a humorous compilation of the numerous lively and pungent sallies which are daily floating along the tide of Literature, and which, for the want of a proper channel for their preservation, are positively lost to the Reading world. Original wits and humorists of our time will here have a medium devoted to the faithful record of the scintillations of their genius. It is not necessary to detail the many attractions which this journal will possess, as the publisher will furnish a specimen number to every person who desires it—(those out of the city, will forward their orders, postage paid)—and he pledges himself that no exertions on his part shall be wanting to make each succeeding number superior in every respect to the preceding ones.

THE SALMAGUNDI will be printed on large imperial paper, equal in size and quality to that which is at present used for the Gentleman's Vade Mecum. It is calculated that MORE THAN 500 ENGRAVINGS will be furnished to the patrons of this Journal in one year—these, in addition to an extensive and choice selection of Satire, Criticisms, Humour, and Wit, to be circulated through its columns, will form a Literary Banquet of a superior and attractive order; and the publisher relies with perfect confidence on the liberality of the American public, and the spirit and tact with which this expensive undertaking will be prosecuted, to bear him successfully and profitably along with it.

The terms of THE SALMAGUNDI will be TWO DOLLARS per annum, payable invariably in advance. No paper will be furnished unless this stipulation is strictly adhered to. Clubs of three will be supplied with the paper for one year, by forwarding a five dollar note, postage paid. Clubs of seven will be supplied for the same term, by forwarding a ten dollar note. The papers that are sent out of the city will be carefully packed in strong envelopes, to prevent their rubbing in the mail.

THE SALMAGUNDI will be published on alternate weeks—otherwise it would be impossible to procure the numerous Embellishments which each number will contain—and the general interest it will afford must be enhanced by this arrangement.

All orders must come postage paid.
Address, CHARLES ALEXANDER, Athenian Buildings, Franklin Place, Philadelphia.
de 29

THE SILK MANUAL.

JUST published and for sale by Sinclair & Moore and Robt. Sinclair, Jr., at the Maryland Agricultural Repository, Light near Pratt street, Baltimore, a complete Manual of the Silk Culture, in which plain instructions are laid down for the culture of the Mulberry, the feeding of the Silk worms, management of the cocoons, reeling, spinning and dyeing of the Silk. In fine, it is a perfect Manual, and comprises every department of the business. The rules are arranged in so plain and methodical a manner that every one can understand them, and by a very few hours attention become master of the business. It is clearly demonstrated in this Manual, that largely upwards of \$500 may be netted from an acre in the Culture; and it is a singular fact connected with the Mulberry as adapted to the making of Silk, that poor dry, sandy, or gravelly land suits it best, the fabric made from worms fed on leaves raised on such soil, being greatly superior in elasticity and richness of gloss to those grown on rich grounds.

Price—per copy, 50 cents.
Liberal discounts made to the trade.

Printed by Sands & Neilson, N. E. corner of Charles and Market streets.

TO AGRICULTURISTS—The analysis of Soils, marls, mineral waters, and other productions, interesting to those engaged in Agricultural pursuits, is performed with promptness and accuracy, by

TYSON & FISHER, Chemists,
no 3 Druggists, No. 192 Market street, Baltimore.

LEON.

THE splendid bull LEON, is now at Clairmont Nursery, where he will remain a few weeks. He is a full blooded improved Durham short horn, and allowed to be one of the best bred animals in the country. He will serve Cows at \$5 each. He is milk white, with a hide as glossy and soft as satin. For his pedigree, see the advertisement, in which he is offered for sale in this day's paper.
no 3

DEVON STOCK.

THE editor of the Farmer and Gardener can at all times supply orders for Devon Cattle. This breed is so distinguished for their easy keep and docility; the richness of the milk of the cows, and for the activity and sprightliness of the oxen, that they would be admirably suited to the purposes of southern agriculturists.

The happy adaptation of the Devonshire Oxen, for the purposes of the farm, will be understood, when it is stated that 4 oxen have been known to plough 2 acres of ground in a day, and a team of them to trot at the rate of six miles an hour with an empty wagon.

Any person wishing to procure them can be supplied by addressing a letter post paid to the editor of the Farmer and Gardener.
nov 10 4t

FOR SALE.

A DURHAM Short-horn bull 15-16 blood. He is from a fine cow and got by Col. Powell's celebrated bull Monk—now two years old. Price, delivered at York, Pa., \$130.

Letters addressed to the editor post paid, will be attended to.
nov 10 2t

A GREAT BARGAIN.

A full blooded Improved Durham Short-horn bull rising five years old, and his 3 sons from 1½ to 2 years old each, 7-8 bred, has been left with the editor of the Farmer and Gardener for sale. These are first rate animals, and would be sold a bargain, if application be made promptly.

All applications by letter must be post paid.
nov 17 3t.

FOR SALE,

A HEIFER rising a year old, in calf by Leon, with a pedigree which makes her a 15-16ths bred improved Durham Short horn—she is well grown, and prettily marked.—Enquire of the editor.
no 3

RUFFLE OATS,

For seed, may be had at the Maryland Agricultural Repository, Light street, Baltimore, by application to
Dec. 8 JAMES MOORE.

GRIST MILLS.

The subscriber has for sale at the Maryland Agricultural Repository, a few of those effective Grist Mills, so much approved of by gentlemen who have tried them. They are adapted to horse-power, and with ease will manufacture 3 bushels of grain into the most beautiful lively meal in an hour.
Dec. 8. JAMES MOORE. 4t.

STOCK OF IMPROVED SHORT HORN DURHAM.

THE editor of the Farmer and Gardener, Baltimore, has for sale two 7-8 and four 3-4 bred cows, 2 full bred and seven 7-8 bred bulls of the improved short-horn breed. They are all fine animals whether regard be had to their milking or fattening propensities. Their pedigrees are indisputable, all tracing to the British Herd book. They will be sold low for cash, their excellence being considered.—To any person, company, or society, who may want several, a great bargain would be given.

Letters addressed to the editor upon this subject, must be post paid.
nov 10 4t

RUFFIN ON CALCAREOUS MANURES, SECOND EDITION, just received at this office.

ALSO,
A few pounds of the celebrated SKINLESS OATS, price 50 cents per lb. said to produce 80 bushels per acre.
R. SINCLAIR, Jr. Seedsman,
oc 13 2t connected with this office

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 37.

BALTIMORE, MD. JANUARY 12, 1836.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, JAN. 12, 1836.

A NEW YEAR'S PRESENT.

We present our subscribers to day with a copy of our *Silk Manual*, and respectfully ask them to accept it as an earnest of our desire to render our services acceptable to them, and of our unceasing efforts to advance their interests by all attainable means. When we first announced our intention of compiling this work, we stated it to be our determination to translate the matter to our columns; but finding that its publication *there*, would probably interfere with the insertion of other valuable agricultural matter daily pressing itself upon our attention, we determined that *we would incur the additional expense of having an edition expressly struck off for our patrons*. We were influenced, in this conclusion, by the belief that the *Manual* would be much more convenient in the *pamphlet form*, than if spread through a series of successive numbers of our paper. As *now presented*, the reader can, by turning to its copious *index*, find, in an instant, any thing connected with the culture he may desire; and it will, of course, remain as a portable guide for all who may feel disposed to enter into the business, and thus very essentially promote this great branch of agricultural industry. The making of money out of this work never entered into our calculations. Our aim from the beginning was to place the subject before the agricultural community in its proper light, believing that when we should have so done, nothing more would be required to awaken a becoming zeal in favor of the silk culture. We knew that agriculturists, like other men, must be convinced that their interests will be promoted in order to induce them to adopt any new branch of industry, or to engage in any untried experiment. To effect our purpose, after examining the whole field, which the investigation of the subject laid open to us, we found all that was necessary to be done was to present an unvarnished tale to the public—to shew by illustrations from what had

been done, what might reasonably be expected to be realized from the culture. If we shall have succeeded in these our objects, all that we contemplated will have been achieved, and we shall be willing to look for our reward to that rich harvest of feeling, which a consciousness of disinterested motives and well intentioned exertions never fail to secure.

DEEP PLOUGHING—MR. CRAVEN'S ADDRESS.

We insert in another part of this day's paper, an essay read before the Agricultural Society of Albemarle county, Virginia, by *John H. Craven, Esq.* It is a plain comprehensive detail of the system of husbandry pursued by that gentleman, which we take especial pleasure in commending to the attentive perusal of our readers. His views with respect to *deep ploughing*, are just such as we have entertained for years, and we are happy to find ourself sustained by the opinion of so enlightened a practical farmer, as we understand Mr. Craven to be. We have seen a most singular instance of the regeneration of an exhausted estate in our own vicinity, *principally by means of deep ploughing*; but independently of this, the common sense of the practice would be sufficient to recommend it to our adoption. It is very happily remarked by Mr. Craven, that "*just as deep as your plough goes, will your soil be,*" and we believe it. But then it is said,—if you plough deep on light sandy soils and break the "*crown*" of the subsoil, the manure will all filtrate and be lost to the growing crop; that the clay which may be turned up, affording no nourishment, will serve only by its tenacious and binding qualities, to impair the growth of the plant, and lessen its rate of yield. We reject these opinions altogether. It is a well settled principle that the heaviest bodies will always sink to the bottom, being carried thither by their own superior specific gravity. If this be well grounded with respect to other bodies, why should it not hold good in regard to soils?—and if it do hold good, have we not a right to believe that the clay being heavier than the sandy soil, will at every occurrence of rain be precipitated, thus again restoring to the original occupant the possession of the surface-position. If this supposition be well based, then the great bug-bear of breaking up the "*crown*" of the subsoil, is but a thing of fancy, after all.

But let us look at this subject in another light. Suppose that, by breaking this *consecrated 'crown,'* we cause the clay of which it is composed, to be mixed up with the sand, what then is the consequence? Why, we produce what is so desirable in agriculture—a *loam*. But, from the very nature of things, the admixture of these bodies, clay and sand, does not produce a *rich loam*. Be it even so. We freely admit this objection to the fullest extent; but then it is not by any means formidable in our eyes; for the application of alimentary and calcareous manures—barn yard, or stable manure, lime and ashes, and a ploughing in of a vegetable lay, will cure this evil. If by the operation of ploughing, we should produce a union of these distinct bodies, and thus create a *loam*, surely that would be a most desirable result, as by so doing we would give being, as it were, to a new body, competent of itself, not only to retain all manures which might be applied to it, but also, to retain moisture sufficiently long for all the purposes of healthful vegetation. We do not pretend to affirm, that, by a single process of ploughing, this *union* will take place; but we would maintain in all courtesy, that at each deep ploughing, more or less of these two bodies will become permanently mixed, and that each operation will give to the surface-soil more and more capacity to retain the clay, until ultimately there will be a perfect commingling and admixture of the respective masses.

We would ask, what good purpose does the preservation of the "*crown*" of the subsoil answer? If it prevents the *descent* of the manures, it *must also* prevent that of the rain water, because it can only be by the process of soaking, or absorbing, that the nutritive property of manure can be thus lost, as we all know that the *tendency* of the volatile principle contained in it, which is eliminated by fermentation, is to *ascend*. If water be thus detained, a question arises, whether the unhealthy action, which in a rainy season, would be generated, would not more than counterbalance any possible good resulting from the retention of the manure. We know very well, that, without the subsoil is sufficiently porous to admit of percolation, a diseased existence must supervene; for there are but few of the family of vegetables that can exist in a soil laboring under a super-

saturation of water. May we not then without doing violence to reason, or entrenching upon common sense, conclude, that, if a gradual draining of fluid substances be essential to a salutary action in the growing plant, by a judicious mixing of tenacious subsoil with its more porous superincumbent surface-neighbor, that we will bring about that precise condition of soil so much desired?

We would ask those who advocate ploughing but 4 and 5 inches deep in light sandy soils, whether the roots of the plant do not penetrate beyond that depth? If they do, the next question occurs, how do they derive nourishment after they have passed the rubicon of this much cherished "crown of the subsoil?" Respectable writers contend that the nutrition which sustains vegetable life, is taken up by means of *moules* at the extreme points of the tap and lateral roots. If this doctrine be true, then the quantity of aliment taken up must be reduced in proportion to the number of roots which pass through the subsoil, because as a natural consequence, the plants, to the extent to which their food is thus curtailed, will be retarded in their growth.

Why is it that alluvial bottoms are more congenial to corn and other long rooted plants?—because the soil being *deeper*, and offering no resistance to the roots, they penetrate farther, and the plants thus derive a greater quantum of nourishment, than when planted in a more tenacious earth, where they are confined and circumscribed in their search after food.

One of the most intelligent of European writers, says:

"The constitutional qualities of gravels point out the propriety of *ploughing them deep*, so that the surface-soil may be augmented, and greater room given to the growth of the plants cultivated on them. A shallow-ploughed gravel can stand no excess of weather, however enriched by manure. It is burnt up by a day or two of drought, and it is almost equally injured by an excessive fall of rain, unless the *pan* or firm bottom, which such soils easily gain, be frequently broken through by *deep ploughing*."

Thus we have good authority for deep ploughing, with respect to *gravels*; and if it be necessary for them, we can see no good reason why the same principle would not apply with equal force to *sands*; for the necessity for increasing the surface-soil, is just as apparent in the one case as in the other. If a shallow-ploughed gravel cannot withstand *excess* of weather, neither can *sands*, unless they be deeply ploughed, as the same cause which operates injuriously in the one instance, would do so, also, in the other. Unless, says our author, the "*pan* or firm bottom be frequently broken through by deep ploughing, it is

burnt up by a day or two of drought." And why is shallow-ploughed gravels thus easily deprived of their moisture?—because, in the first place, from the shallowness of the soil submitted to the operation of the plough, and its exposure, to its entire depth, to the influence of the sun and air, the evaporation is carried on more rapidly than it would have been, had the earth been fallowed to greater depth—and secondly, because as the plants have to depend altogether for nourishment, as well as moisture, upon what their roots extract above the *pan* or crown of the sub-stratum, when that shall have been deprived of the usual supply, the plants must, as a natural consequence, suffer from the absence of those sources of nutrition and moisture, which had theretofore preserved them in freshness and vigor.

Let us look at the objections urged against the practice.

An English author says:

"On thin clays and barren sands, the benefit of deep ploughing is very questionable; especially when such are incumbent on a till bottom, or where the subsoil is of a yellow-ochre nature: such when turned up, being little better than poison to the surface, unless highly impregnated with alluvial compost, the effect of which expels the poisonous substance contained in this kind of subsoil, and gives a fertility to the whole mass more decisively permanent, than would follow a heavy application of the best rotten dung."

Sir John Sinclair, says, that "deep ploughing is highly advantageous upon every soil, excepting those where the substratum is of an *ochry sand*."

Sir Humphrey Davy, says:

"Deep ploughing may be a very profitable practice in a rich thick soil, and in a fertile shallow soil, situated upon cold clay or sandy subsoil, it may be extremely prejudicial."

Again, Sir Humphrey, says:

"The depth of the furrow in ploughing must depend upon the nature of the soil, and of the subsoil. In rich, clayey soils, the furrow can scarcely be too deep; and in *sands unless the subsoil continues some principles noxious to vegetables, the same practice should be adopted*. When the roots are deep, they are less liable to be injured, either by excess of rain, or drought; the layers shoot forth their radicles into every part of the soil; and the space from which the nourishment is derived, is more considerable, than when the seed is superficially inserted in the soil."

It is very evident from the authorities here quoted, that the objections to deep ploughing arise more from an apprehension of the *properties* of the subsoil to be disturbed, than from the disturbance itself; that it is the dread of turning up a noxious substance, and not any apprehension of danger to ensue from the precipitation of the living principles of the surface soil. With respect to the *general utility* of deep ploughing, there is a universal concurrence of opinion, with the excep-

tion before referred to, and the evil of that exception is furnished with a remedy—"alluvial compost" is the antidote for the bane, and where that may be wanting in the surface soil, a substitute may be provided by the husbandman to neutralize the deleterious effects of the substratum which may be turned up. Alluvial compost, is nothing more than the decomposition of *vegetable* substances, mixed, in many instances, with calcareous matter, in some form or other; and certainly it will not be pretended that the absence of these cannot be supplied.

Having shewn by the arguments furnished by the objectors, that there is no objection, which cannot be removed, against deep ploughing, let us see what is said as regards the advantages of the practice, generally.

Sir John Sinclair, says:

"Deep ploughing is likewise of great consequence to every species of plant, furnishing not only more means of nourishment to their roots, but above all, by counteracting the injurious consequences of either too wet or dry a season. This is a most important consideration, for if the season be wet, there is a greater depth of soil to absorb the moisture, so that the plants are not likely to have their roots immersed in water; and in a dry season, it is still more useful, for in the lower part of the cultivated soil, *there is thus a reservoir* of moisture, which is brought up to the roots of the plants, by the evaporation which the heat of the sun occasions. By deep ploughing, also, the ground may be more effectually cleared of roots and weeds of every description; in particular, it is the best mode of eradicating thistles. By deep ploughing, animal and vegetable manures, which have such a tendency to rise to the surface, are properly covered. This cannot be done by shallow ploughing, in consequence of which, much of the value of such manure is lost. And, by deep ploughing a heavier crop is raised, than can be got from a shallow furrow."

Will an agriculturist ask for more conclusive reasons in support of the propriety of deep ploughing? We think not—and unless he can prove that the crops which grow on sandy soils require less nourishment, have shorter roots, are better adapted to withstand the alternate effects of *wet* and *drought*, than those which grow on more tenacious soils, he must, we think, conclude that deep ploughing in sandy soils, would be especially promotive both of the growth and yield of the plants which may be raised on them.

[From the Lynchburg Virginian.]

AN ESSAY,

Read before the Agricultural Society of Albemarle.

In obedience to a resolution of the Society requiring of me an essay upon some agricultural subject, I shall proceed, hastily, to give, first, some general views on the subject of ploughing. Deep ploughing, is certainly the first great step towards

improvement; it not only facilitates the improvement of the land, but it is a safeguard against the drought, and also the washing rains of summer, which we often suffer from,—especially the corn crop. But the great advantages resulting from deep ploughing do not stop here—by it, you bury all seed injurious to the land and crop so deep, that they never vegetate, leaving a clean surface for the seed sown. Good ploughing, however, cannot be done, without good ploughs, of which we have very few. The M'Cormick plough, when well made, is a good plough for light foul land, but it has not sufficient strength for rough, or turfy land; and I have never seen one that would stand a draught of three strong horses, and that would not get out of order in one season, and often in one day.

The plough which I think best adapted to our soil, and would recommend to the Society, is the bar-share. I have used this plough for more than thirty years, and I believe the improvement of my farm is more indebted to good ploughing than any thing else. I will endeavor to exhibit one for the inspection of the members of the Society, and would urge them to adopt some mode by which they could be produced.—The bar share has many advantages over any other plough,—one great advantage is the coulter, another is the peculiar shape of the mould board, which does not offer so great a resistance to the surface, and at the same time turns the soil more effectually. I have been ploughing from eight to twelve inches deep with this plough ever since I have been farming, without ever in one single instance injuring my land, but on the contrary, greatly to its improvement.

There is, however, one great mystery with respect to deep ploughing, which I have not been able to solve to my satisfaction, and which I would like some of the members of the Society, more conversant with the subject than myself, to explain; it is this—no matter how much clay you turn up in flushing your land, in one season it all disappears, and you see nothing but good soil again upon the surface. One more observation upon the subject of deep ploughing, and I shall then pass to another important subject connected with agriculture. It is certainly very desirable to have a deep soil for profitable cultivation, and if nature has not provided it, art must be resorted to. Long experience has convinced me of this fact, that just as deep as your plough goes, so deep will your soil be.

I will now submit a few remarks on the second step towards improving,—that is, the carefully making and taking care of manure. How few of us make one half of what we might, and how very important an item it is, in the account of farming? There are many opinions as to the time, and mode of using it. Convenience has always dictated the time, the quantity being the greatest object with me. I have always thought it unimportant whether you make use of it on the surface, or plough it under. By using it on the surface, the first crop derives a greater benefit from it than by ploughing it under,—but by ploughing it under, the second and succeeding crops derive a greater benefit, than by using it on their surface, and is to be preferred, except for the wheat crop, which I think best to harrow in with the wheat. One advantage,

however, of the surface mode, is, that the clover is more apt to succeed well, on soils not particularly kind to the production of that invaluable crop. As there are other subjects to which I wish to call the attention of the Society, I should be consuming more of its time than the present occasion would admit of, were I to dwell more lengthily upon this important branch of my essay.

I would now invite the attention of the Society to the great advantage to be derived from having a farm entirely rid of all pests to which our soil is so liable. Long experience has proved to me, that a farm of this character, may be worked to a greater advantage with almost half the number of hands, than one infested with pests, such as thistle, mullein, St. John's wort, wild carrot, and many others, not less objectionable and equally injurious to the land.—The remedy which I have adopted is to keep a large stock of cattle, I am very well aware that this is considered by many (and some judicious farmers too) as bad management; but I have found that my farm, if not improved as fast, is at least clean, and improvement is facilitated; and, it is in fact almost the only mode of getting rid of the *sassafras*.

Another very important subject to which your attention is invited, and one attended with economy to the farmer, (which is certainly an important consideration and recommendation to any plan connected with the operations of a farm) is that of stone fencing, which is indeed "killing two birds with one stone;" for while you are moving a great pest, you are securing to yourself a lasting fence, and one that is no inconsiderable ornament to your farm. My farm is nearly half enclosed with a fence of this kind, and I find it much cheaper than cutting and hauling rails every few years. There are a great variety of opinions as to the best mode of constructing a stone fence,—but I have found the following to be the most durable, or, in other words, least liable to tumble. It is of course important to give the stone work depth of foundation sufficient to place it beyond the influence of the frost. The fence should be 8 feet wide at the base, and 3 feet high, and from 6 to 8 inches on the top; upon this place a lasting rail either of chesnut or heart pine. At intervals of 8 feet, I let into the ground locust stakes, on both sides inclining to the wall and crossing on the rail; in the lock or cross of the stakes, another rail is placed, which keeps the entire fence perfectly secure; a fence on this plan, may be said, to be "as lasting as the hills."

Observing some time since a piece from the *Gennese Farmer*, on fattening hogs with apples, I was induced this year to make a trial of it, and I now take pleasure in communicating the result to the Society. In June last my hogs were poor and diseased. I put them into my orchard to let them get the benefit of the apples, and to my agreeable surprise, in a few weeks, my hogs in the orchard were much fatter than those which had been fed on corn, and continued to thrive until they were entirely fat, not having had one grain of corn—and I would venture at this time, to challenge a comparison with any lot of hogs that can be produced.

I sincerely hope that others may be induced, from this experiment, to turn their apples into

pork, instead of permitting them to fall and rot upon the ground.

I conclude my humble contributions to the society, by offering to you, gentlemen members, my unfeigned thanks for the honor you have conferred upon me.

JOHN H. CRAVEN.

[Gleanings from English Works.]

THE SHORT HORNS.

Whatsoever differences of opinion may prevail respecting the comparative merits of our several breeds of cattle, it must be admitted that the short horns present themselves to notice under circumstances of peculiar interest. Possessing in an eminent degree a combination of qualities which have generally been considered incompatible, and rendered irresistibly attractive to the eye by their splendid frame, and beautifully varied colors, it is not surprising that they have become objects of public curiosity; that they have realized for their breeds enormous sums of money; and that, throughout our island, and in every foreign country where agriculture is attended to, they are in increasing request.

It might tend to throw much light on the science of breeding, could these animals be traced, in the progress of their improvement, to an earlier period than has heretofore been found possible. Of the extent of that improvement we may, however, from a case, discover resemblance just sufficient to support the belief in a very remote alliance, but there all similarity will cease.

From the earliest periods to which we have any accounts of breeds of cattle, the counties of Durham and York have been celebrated for their short-horns, but principally, in the first instance, on account of their reputation as extraordinary milkers. To recite their recorded feats at the pail, would be to invite incredulity; but it may be asserted on the best evidence, that, taken as a breed, they have never in this particular been equalled. The cattle so distinguished were always, as now, very different from the improved race. They were generally of large size, thin skinned, sleek-haired, bad handlers, rather delicate in constitution, coarse in the offal, and strikingly defective in the substance of the girth in the fore-quarters. As milkers, they were most excellent, but when put to fatten, as the foregoing description will indicate, were found slow feeders, producing an inferior quality of meat, not marbled or mixed as fat and lean, and in some cases, the latter was found of a particularly dark hue. Such, also, are the unimproved short-horns of the present day, and the distinction cannot be too frequently asserted, because they are in many cases, considered as specimens of the improved breed, and have actually been resorted to in trials as to the comparative aptitude of animals to fatten,—trials which it is evident they could not successfully sustain.

A period of more than eighty years has now elapsed, since the short-horns, on the bank of the River Tees, hence called the Teeswater breed, had assumed a very different character to that contained in the foregoing description. In color they resembled the improved short-horns, being occasionally red, red and white, and roan, though the last named color was not then so prevalent as now. They then possessed a fine mellow skin

and flesh, good hair and light offal, particularly wide carcasses, and fore-quarters of extraordinary depth and capacity. When slaughtered their proof was extraordinary, and many instances are recorded of the wonderful weight of their inside fat.

The remarkable difference which existed between the Teeswater and the old improved short-horns may, with propriety, be ascribed to a spirit of improvement which has sometime manifested itself among the breeders of the banks of the Tees, whose laudable efforts were well seconded by the very superior land in the vicinity of that river. No reasonable doubts can be entertained that they proceeded on a judicious system of crossing with other breeds, because it was utterly impossible to raise such a stock as the Teeswater from pure short-horn blood. One cross to which they referred, was in all probability, the white wild breed; and if this conjecture be well-founded, it will be apparent whence the short-horns derived a color so prevalent among them.

It is also asserted that, about the period in question, Sir William St. Quinton, of Scampton, imported bulls and cows from Holland, which were crossed with the stock of the country. It would tend to little advantage to proceed with conjectures, as to what other breeds were resorted to, if any: this much is certain, that great improvement was soon manifested, and a valuable variety established, as the following instances will prove.

Mr. Millbanks, of Birmingham, one of the leading improvers, bred and slaughtered an ox, which at five years old, weighed four quarters, one hundred and fifty stones, of fourteen pounds to the stone, 2,100 lbs. producing 16 stones of tallow, 224 lbs.: and a cow bred from his stock, slaughtered by Mr. Sharter, of Chilton, 12 years old, weighed upwards of 100 stones, 1540 lbs.

From Mr. Millbanks' time, the Teeswater cattle continued to sustain their excellence and celebrity in various hands, until Mr. Charles Colling adopted them, when he manifested a superiority of skill as a breeder, which, in a very brief period secured him an ample fortune.

Whatever had been the merits of the Teeswater cattle, it is certain Mr. Colling greatly improved them; and though it has been asserted that his success was the result of chance, arising from the possession of an animal, with the merits of which, it is supposed, he was at one period unacquainted, the writer of this article is of opinion that Mr. Colling's success resulted from a deliberate and well considered plan. He found the Teeswater like all other extravagantly large cattle, frequently of loose make and disproportion. He was sensible, also, of the difficulty of breeding with any thing like certainty, *large good animals*; and though he has declined on all occasions to throw any light on his views and proceedings, the writer thinks he can detect, in the very outset, and through the progress of his practice, a resolution to reduce the size of this breed, and at the same time, and by that means, to improve its form. This is supposed to have effected, in the first instance, through the medium of a bull called "*Hubback*," an animal respecting which there has been much controversy, principally concerning the purity of his blood, a question now of little importance, because it is admit-

ted on all hands that Mr. Colling adopted another cross, which prevails in a majority of superior short-horns of the present day. It may, notwithstanding, be a matter of interest to state a few particulars respecting this bull.

Without entering on an inquiry by what circumstances *Hubback's* title to be considered of pure blood is supported or weakened, it may suffice to observe that it appears probable he possessed on one side the imported blood. The possessor of his dam was a person in indigent circumstances and grazed his cow in the highways. When afterwards she was removed to good land, near Darlington, she became so fat that she did not again breed; and her son having the same feeding propensity, in a high degree, was useful as a bull during a very short period. The quality of his flesh, hide and hair, are supposed to have been seldom equalled, and as he was smaller than the Teeswater cattle, he was eminently calculated to forward Mr. Colling's views.

It has been remarked that we have at present no superior horse on the turf, which does not boast the blood of the Godolphin Arabian; so it may be asserted that we have no superior short-horns which do not claim descent nearly or remotely, from *Hubback*.

After the use of this bull, Mr. Charles Colling proceeded with singular success to produce from time to time, superior animals; and the number of bulls he disposed of by letting was highly encouraging. But the circumstance which brought the improved short-horns into most extensive notice was the production of the "*Durham Ox*," an animal which speaks volumes in favor of even a single cross of this blood; for the ox was the produce of a common cow, which had been put to Favorite. At five years old the Durham ox was sold to Mr. Bulmer, of Hamby, near Bedale for public exhibition, at the price of £140: this was in February, 1801. He was at that time computed to weigh 168 stones, of 14 lbs., his live weight being 216 stones;* [which at fourteen lbs. to the stone is 3024 lbs.] and this extraordinary weight did not arise from his superior size, but from the excessive ripeness of his points. Mr. Bulmer having obtained a carriage for his conveyance, travelled with him five weeks, and then sold him and the carriage, at Rotherdam, to Mr. John Day, on the 14th of May, 1801, for £250.

On the 14th of May, Mr. Day, could	l	s	d
have sold him for	525	0	0
On the 13th of June, for	1,000	0	0
On the 8th July, for	2,000	0	0

Mr. Day travelled with him nearly six years, through the principal parts of England and Scotland, till at Oxford, on the 19th of February, 1807, the ox dislocated his hip-bone, and continued in that state till the 15th April, when he was about to be slaughtered, and notwithstanding he must have lost considerably in weight, during

Note by the Editor of the Farmer and Gardener.

*This weight is less than that of the splendid bull, Emperor, raised by the Hon. Charles A. Barnitz, of York, Pennsylvania; he weighed 3,714 lbs., which is 690 more than the weight of the great Durham ox, which gave the first impetus to that celebrity which has subsequently been awarded the Durhams every where.

those eight weeks of illness, his carcass weighed—

	Imp. stones	lbs.
Four quarters	165	12
Tallow	11	2
Hide	10	2—2640lbs.

This was his weight at 11 years old, under all the disadvantages of travelling in a jolting carriage, and eight weeks of painful illness. Had he been kept quietly at Kelton, and fed until seven years old, there is little doubt but he would have weighed more than he did at ten years old, at which age Mr. Day stated his live weight to have been nearly 3,400 weight, or 270 stones, from which if fifty be taken for offal, it leaves the weight of the carcass 220 stones.

It is a well ascertained fact, that during his career as a breeder, Mr. Colling tried several experiments in crossing, and the breeds to which he resorted on these occasions, being very considerably smaller than the *short-horns*, this circumstance, tends to corroborate the writer's opinion, that he considered it desirable to reduce their size. The cross with the *Kyloe* led to no results worthy enumeration; but that with the *polled galloway* must not be passed over without comment. Before stating the circumstances attending this experiment, it may be proper to observe, that no breed of cattle promised so successful a cross with the short-horns as the *galloway*. They were calculated, by their deep massive frames and short legs to bring the short-horns nearer the ground, and to dispose their weight in a more compact manner; their hardy habits would be essentially useful, and the quality of their flesh and hair were such as to render the experiment still more safe. Add to this, that they could be obtained of a red color, and we are prepared to admit, even without the sanction of a successful experiment, that they were admirably adapted to cross with the short-horns standing frequently too high from the ground, not very well ribbed home, and not seldom of a loose disjointed frame.

To this breed Mr. Colling resolved to resort; and though at the time when he did so, the event was regarded with some degree of ridicule by the pure-blood advocates, and comments passed which would have deterred ordinary men from the exercise of their judgment, but Mr. Colling persisted.

He was much favored by circumstances in promoting his object, which was to take one cross, and then breed back to the short-horns,—the only course by the way, in which crossing can be successfully adopted. To breed from the produce of a cross directly among themselves, will lead to the results which have induced many persons, without due consideration, to believe conclusive against crossing; but to take one cross, and then return and adhere to one breed, will in the course of a few generations be found to stamp a variety with sufficient certainty.

On this subject the writer is able to avail himself of the evidence of a gentleman who has addressed a communication on the subject, to the conductor of the *British Farmer's Magazine*, which is so pertinent to the present subject, that the temptation to take an extract is irresistible. It is as follows:—"In the 27th number of your valuable Magazine, when giving an account of my two years-old steer, you also give an extract from my letter on the advantages of

crossing cows of different breeds, with improved short-horned bulls; and in confirmation of this opinion, (not hastily adopted, but the result of several years' practical experience, and a close attention to the experiments of several friends during the last seventeen years) I send you the portrait and a short account of a two-year old Durham and Devon heifer of mine, lately slaughtered by Mr. William Daniel, (of Avergavenny) and accompany it with a few brief statements of the advantages derived from this system by several of my own personal friends.

"His heifer was the second cross, and was of a light grey color. She weighed 35 scores and 8 lbs.; rough fat 98 lbs. She was allowed to be the fattest and best beast of her age, in all points, ever seen in Avergavenny. She had a dead calf about 6 weeks before Christmas; was dried the 17th January, and killed the 10th of June. She sold for £19. 3. 6d.

Her live weight on the 8th June, was 1232 lbs.
do do 17th January, 840

Increase in 140 days 392 lbs.

"Being aware that strong prejudice and much incredulity existed on the subject of crossing, I courted the attention of all the respectable farmers, breeders, and feeders in this neighborhood.—Many came to see her when first put up, and repeatedly afterwards during the five months she was feeding; and they all concurred in saying she went on faster than any beast they had ever seen. She never had any oil cake.

"I have seen many excellent beasts bred from improved short-horn bulls, and long-horn cows; indeed, I never knew one of these bulls put to any cow where the produce was not superior to the dam; but the cross which I advocate, and with which I am best acquainted, is that with the *Devon* cow.† I have uniformly remarked that each succeeding cross was attended with a proportionate improvement, in size, quality of flesh, and aptitude to fatten. In every instance they have shewn themselves superior milkers, and stand to the pail till within six or eight weeks of calving, and several instances have come under my own knowledge where they have never been dry since they first calved; and so highly are they prized as milkers, that a friend of mine, who hired out dairies, informed me that the dairymen gave him 2£ per year per cow, more for the half and three quarter bred than they would give for cows of other breeds.

* * * * *

"An opinion generally prevails that the Short-horns are unfitted for work, and in some respects it is admitted they are so, but the correct reason has not been assigned, and the question may fairly come briefly under notice. That they are able and willing to work the writer knows, from one in particular among many instances. He has now a team of two-years' old steers, working constantly nine hours a day; a system he would by no means recommend, and forced on him by circumstances connected with entrance on a new farm, at present ill adapted to grazing cattle.—

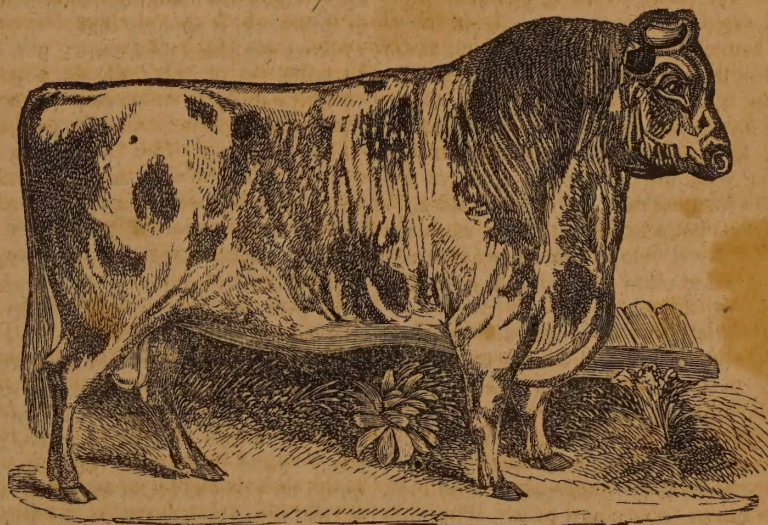
† The splendid cow Flora raised by, and recently belonging to, Mr. Barnitz, is a striking proof of the justness of this remark—she being $\frac{3}{4}$ Short-horn, $\frac{1}{4}$ *Devon*.—Ed. Far. & Gar.

They work admirably; but surely cattle which, as the preceding account proves, will go as profitably to the butcher at two years old as any other breed at three, and as many even at four, ought never, as a general rule to be placed in the yoke. No beast in the present advanced state of breeding, ought to be put upon a system which arose out of the necessity of obtaining compensation by work for the loss attending a tardy maturity. But where it may be convenient, the Short-horns, particularly the bulls, work admirably, as their great docility promises; and there are many operations going on in every farm, which a bull would be judiciously employed in performing. And as the bulls of this breed are apt to become useless, from acquiring too much flesh in a state of confinement, moderate work might, in most cases, prove beneficial for such as are intended for use at home.

"As was before observed, the specimens which accompany this account will render little comment necessary on their form. With deference, however, it is submitted to the breeders of Short-

horns, that they should avoid breeding from too close affinities, and while they steer clear of coarseness, should require a sufficiency of *masculine* character in their males. The portrait of Lord Althorp's bull Firby evinces this requisite in a proper degree. He has also—but, indeed, it is only part of the other; for without it good masculine character cannot exist—an excellent *loin*. This is a point in which many short-horns are rather defective, and it is one of infinite importance. Add to this, that if, in many instances, the length of the carcass were abated, as well as that of the legs, a hardier animal, with equal size, and on a more profitable scale, would be produced. The facilities for making this improvement are sufficiently numerous, the Short-horns being now more generally diffused. That wide diffusion also multiplies the means of selecting for milk; a quality which should not be lost sight of; for it is the *combination* of perfections which has conferred, and will perpetuate, the superiority of this breed of cattle.

PORTRAIT OF LORD ALTHORP'S BULL.



The color of the improved short-horns are red or white, or a mixture of the two, combining in endless variety, and producing very frequently most brilliant effect. The white it is probable, they obtained from an early cross with the wild breed; and whenever this color shows itself, it is accompanied, more or less, with a red tinge on the extremity of the ear: a distinctive character, also, of the wild cattle. No *pure improved short-horns* are found of any colors but those above named. There is a large coarse short-horn, prevailing particularly in Lincolnshire, denominated in the quotations of the Smithfield markets, '*Lincolns*,' and generally sold at prices below those of any other cattle. These are frequently black, black and white, blue and dun; but they have no further affinity with the improved short-horns, than as the latter have been referred to for their improvement, which has been accomplished to a considerable degree. A similar description of large, coarse short-horns, of these objectionable colors—for they generally accompany a bad quality of flesh—prevails in some of the midland counties. They are great consumers of food, gutty,

and particularly low and bad in the loins, with excessively heavy shoulder blades. The owners of this stock, however, are crossing with the improved breed; but the dairy farmers of Gloucestershire are so much alive to the superiority of the Short-horns, that they lay hold with avidity of any thing which approaches them in color, or is called by the name. Indeed should this breed continue to obtain the requisite attention, to maintain it in its present excellence, it is not too much to suppose that it will, before long, alter the character of the cattle in most of the great breeding districts. It would have been thought incredible some years ago, but is nevertheless the fact, that they are treading closely on the strongholds even of the Herefords; and an observing traveller who sees their colors starting to view in very unwonted situations, must pronounce them universal intruders.

A milch cow, good for the pail as long as she is wanted, and then quickly got into marketable condition, should have a long and rather small head. A large headed cow will seldom fatten, or give much milk. The eye should be bright, yet

with a peculiar placidness and quietness of expression; the chaps thin, and the horns small.—The neck should not be so thin as that which common opinion has given to the milch cow. It may be thin towards the head, but it must soon begin to thicken, and especially when it approaches the shoulder. The dew lap should be small; the breast, if not so wide as in some that have an unusual disposition to fatten, yet very far from being narrow, and it should project before the legs; the chine to a certain degree fleshy, and even inclining to fulness, the girth behind the shoulder should be deeper than it is usually found in the Short-horn; the ribs should spread out wide, so as to give as globular a form as possible to the carcass, and each should project farther than the preceding one to the very loins, so that, after all, the milch cow must be a little wider below than above, yet as much breadth as can possibly be afforded to the more valuable parts. She should be well formed across the hips and on the rump, and with greater length there than the milker generally possesses, or if a little too short, not heavy. If she stands a little long on the legs, it must not be too long. The thighs somewhat thin, with a slight tendency to crookedness, or being sickle hammed behind; the tail thick at the upper part, the tapering below; and she should have a mellow hide and little coarse hair. Common consent has given to her large milk veins, and although the subcutaneous or milk vein has nothing to do with the udder, but conveys the blood from the forepart of the chest and sides, to the inguinal vein, yet a large milk vein certainly indicates a strongly developed vascular system—one favorable to secretion generally, and to that of the milk among the rest.

The last essential in a milch cow that we shall mention, is the udder, rather inclining to be large in proportion to the size of the animal but not too large. It must be sufficiently capacious to contain the proper quantity of milk, but not too bulky, lest it should thicken and become loaded with fat. The skin of the udder should be thin, and free from lumps in any part of it. The teats should be of moderate size; at equal distances from each other every way, and of equal size from the udder to nearly the end, where they should run into a kind of point. When they are too large near the udder, they permit the milk to flow down too freely from the bag, and lodge in them; and when they are too broad at the extremity, the orifice is often so large that the cow cannot retain her milk after the bag begins to be full and heavy. The udder should be of nearly equal size before and behind, or if there is any difference, it should be broader and fuller before than behind.

Mr. Colling's short-horn bull *Bolingbroke* was put to a beautiful red-polled *Galloway* cow, and the produce being a bull calf, was in due time, put to *Johanna*, a pure short,—she also producing a bull calf. This grandson of *Bolingbroke* was the sire of the cow, *Lady*, by another pure short horn dam, and from *Lady* has sprung the highly valuable family of improved short-horns, termed, in reproach, the *alloy*. How far the alloy was derogatory let facts testify.

It will probably be admitted that the prejudice against this cross was at the highest at the time of Mr. Charles Colling's sale. The blood had then

been little, if at all, introduced to other stocks, and it was manifestly the interest, whatever might be the inclination, of the many breeders who had it not, to assume high ground for the pure blood, and to depreciate the alloy. Under these untoward circumstances for the alloy, what said public opinion, unequivocally certified by the stroke of the auctioneer's hammer? *Lady*, before mentioned, at 14 years old sold for 206 guineas. *Countess*, her daughter, 9 years old, for 400 guineas. *Laura*, another daughter, 4 years old, for 210 guineas. *Major* and *George*, two of her sons, the former 3 years old, the latter a calf, for 200 guineas and 130 guineas, besides a number of others, more remotely descended from *Lady*, which all sold at high prices—in fact, in a sale of 48 lots, realizing £7115 17s., *Lady* and her descendants sold for a larger sum than any other family obtained. *Comet*, by *Favorite*, sold for 1000 guineas—bull calves under a year old sold from 50 to 170 guineas; heifers from 35 to 206 guineas, and heifer calves under a year old from 25 to 106 guineas.

[From the statement, in detail, of Mr. Colling's sale, which has been published before in extenso in this work, it appears that

17 cows were sold for	£2802	9	0
11 bulls	2361	9	0
7 bull calves	687	15	0
7 heifers	942	18	0
5 heifer calves	321	6	0

£7115 17 0 = \$31,593 95]

"The writer has known many instances of the highest bred short horns giving upwards of 4 gallons, wine measure, of milk, night and morning; and it is certain that attention only is requisite on the part of the breeder to perpetuate this quality in any desirable extent. While on this subject, it is proper to observe, that the excessive quantities of milk obtained from the improved; but a moderately good milker of the latter kind will be found to yield as much butter in a week as one of the former; the milk being unquestionably of very superior quality; and, indeed, it was likely such should be the case, and that the artificial change in the animal economy, which leads to an excessive secretion of flesh and fat, should also be productive of other rich secretions. Within the last three or four years, affidavits were sworn before a magistrate in America, that an improved short horn cow imported thither produced after the rate of 20lb. of butter per week."

Wherever the improved short-horns have been crossed with other cattle their superiority is equally manifest in respect of dairy qualifications as in every other.

The quantity of milk given by some of these cows is very great. It is by no means uncommon for them, in the beginning of the summer to yield 30 quarts a day, there are rare instances of their having given 36 quarts a day; but the average measure may be estimated at 22 or 24 quarts.

[From an experiment made by Mr. Calvert, of

*Note by the Editor of the Farmer and Gardener.—*Flora*, the celebrated cow of the Hon. Charles A. Barnitz, of York, Pa. produces when fresh from 16 to 20lbs. of butter per week.

Sandysike, near *Brampton*, on the quantity of butter yielded by one of his improved short horns, she averaged in 32 weeks 11 21-32 lbs., having yielded during that period 373 lbs. of butter.]

THE HORSE.

[Quotations from *Low's Elements of Practical Agriculture*.]

The horse is vastly modified in his form and characters by the physical condition of the countries in which he is naturalized. If fed in a country of plains and rich herbage, he tends to become large in his form; and such is the character of the horse of the plains of Northern Europe, as of *Holstein*, *England*, and other countries abounding in rich herbage. But in an elevated country, where the herbage is scanty, the size and form of the horse vary with the circumstances in which he is placed. There he becomes small, hardy, and capable of subsisting on the scanty herbage with which the mountains supply him. No contrast between animals of the same species can be greater than that between the horse of the mountains and the horse of the plains. The pony of *Norway* or the *Highlands of Scotland*, as contrasted with the huge horse of the *Lincolnshire fens*, presents such extremes of strength and size that it is difficult to believe that creatures so different can be of the same species. Yet all this great diversity is produced by a difference in the supplies of food, as influenced by the effect of situation.—Nor is this peculiar to the horse; the domestic ox and the sheep are subject to the same law, and in a no less remarkable degree. These animals are essential to the subsistence of the human race, and, by a beneficent provision of nature, they are formed to adapt themselves to the circumstances in which they are placed.

The horse fed on the arid plains and scanty herbage of warmer countries, assumes characters and a form entirely distinct from those of the large and massy animals fed on the rich pastures of temperate countries. It is from this cause that the large horse of *England* and the northern plains of *Europe* contrasts in a striking manner with the lighter shape of the horse of other regions. As we pass from the northern to the southern parts of *Europe*, this change of form and character appears, but yet more when we have crossed into *Africa*. There the horse of the desert displays the light form and agile shape which fit him for his condition. We see that he is here the creature of the circumstances in which he is placed. The heavy horse of the plains of *Germany* and *England* could no more subsist on the dry and scanty herbage of *Arabia* than on the heaths of *Norway*. The species would perish in conditions so different did nature not prove a remedy, by adapting the animal to its condition.

The ancient horses of the north of *Europe* must have consisted either of the smaller horses of the mountains or of the larger horses of the plains. The horse which was chiefly employed for common uses, for war, for the tournament, and even for the chase, seems to have been of the latter kind. This appears from the accounts and representations given of him, and from the form which he yet retains when unmixed with the blood of the lighter racers of the South and East. It is to this intermixture that the technical

term *blood* is applied. Importations long ago took place of horses from Spain, from Barbary, and the Levant; and, at a later period, from Arabia. The African and Arabian horses accordingly have given their characters to the blood horse of England and its innumerable varieties.

The animal in which this effect of blood is the most remarkable is the English race-horse. For the combination of speed with the necessary strength this creature can scarcely be surpassed. He forms, however, a race of artificial creation, admirably suited for a particular purpose, but not otherwise deserving of cultivation, except from this, that it is the stallions of his race that continue the excellence and purity of the parent stock.

The superior class of riding-horses generally termed the hunter, is perhaps the finest race of horses known. It combines the blood of the Arabian, and other races of the South and East, with the powerful form of the horses of the north of Europe in a much happier proportion than the race-horse.

From the hunter downwards to the races where no mixture of southern blood can be traced, the gradations are innumerable. It is in this class that our road-horses and hackneys, the horses employed in our coaches and carriages of all kinds, nay, often in the mere labor of heavy draught, are contained. It forms the most numerous class of horses in the country. But a large proportion is bad, having lost the hardiness and strength of the native race, without having arrived at the speed and other qualities of good breeding.

The remaining class of horses consist of those in which no mixture, or a very slight one, of stranger blood is found. These are the ponies of our mountains, or the larger horses of the plains. It is these last that interest the farmer as the animals of labour, and to them we commonly apply the term *cart-horse* or, *farm-horse*.

STABLE AND TREATMENT.

The farm-horse demands, neither in the training nor in the feeding, that nicety which is required in the case of the horse designed for rapid motion or irregular labor. He requires merely to be maintained in good order, never to be worked beyond his power, and never to be allowed to fall, in condition, below the work which he is to perform.

The stable for the farm-horse, as for every other, should be spacious and well ventilated. It is a great error to suppose that horses require a close, warm stable, to preserve them in health. To keep them fully sheltered, and free from action of any cold current, is all that is requisite. The horse is well suited to bear an equal temperature, but not sudden changes produced by artificial means. Farm-horses regularly worked have been known to be kept throughout the coldest winters in merely open sheds, not only without injury, but with greater benefit to their health than if they had been too closely confined.

Next to ventilation in importance, is cleanliness of the stable. No filth should be suffered to accumulate, but every day the stable should be cleaned out, with the same attention for the farm as for the saddle horse. In the farm-horse stable, every ploughman should have a small fork, a curry-comb, a brush, a mane comb and a foot-picker. Light should be admitted into every stable, to

a certain extent. But in the case of farm-horses, which are only in the stable during the hours of rest and feeding, less light is necessary than in the case of the saddle-horse, which passes a great part of his time within doors. The light required for the farm-horse stable is that which is sufficient to allow the workmen to perform their duties in the day-time. Sometimes there is a room adjoining the stable for holding the harness, but it is perfectly convenient and sufficient in practice, to have the simple furniture of the farm-horse hung on pins in the wall behind each pair of horses.

The food of the horse in this country consists of herbage, or green forage, as clovers and sainfoin, of dried forage, as hay and straw; of various farinaceous substances, as oats, barley, peas, and beans; and of the succulent roots of plants, as the potato, the turnip, the carrot, the parsnip, and the beet. Of the grains given to the horse, the most generally employed in this country, and that which is regarded as well adapted to his strength and spirit, is the oat.

The oat is, for the most part, given to the horse without any preparation, though it is sometimes bruised, which is always beneficial, by rendering it more easily masticated and digested. It is usually given in portions at a time, familiarly known under the term feeds; the measure of which, however, varies in different districts. A feed in some places consists of a gallon, being the eighth part of a bushel, and weighing, upon a medium, about 4½ lbs.

Two gallons in the day, or 9 lbs., are considered to be good feeding when the horse is on dry food, and not on hard work; when on hard work, the quantity may be increased to 3 gallons, and when on light work, and green food, it may be reduced to 1 gallon, and sometimes altogether withdrawn. But on an average, 2 gallons in the day, that is, about 90 bushels in the year, may be sufficient in every case for the working horse of a farm. In practice, too, it is not the superior but the lighter oats, that are given to the farm-horses. These are the light corn formerly described.

Oats may be given to horses reduced to a state of meal, but this is only practised in the case of gruel given to a sick horse. To induce a horse to take gruel, it is put into a pail and placed beside him, so that when thirsty he may drink of it.

Meal is sometimes given with cold water to horses, when travelling. This is a refreshing feed to a horse on a journey, and a safe one when the chill is just taken off the water; but it is chiefly employed in journeys when time is of importance and it is accordingly rarely given in the case of a farm-horse, who should always have time given him to feed.

When oats are kept in a damp state, fungi grow upon them, and they acquire a musty smell and bad taste. They should never be given in this state to a horse, but should first be kilndried, so as to expel the moisture and destroy the fungi.

Barley is more nutritious than oats, although, in the practice of this country, it is not so much approved of in feeding. But over all the Continent, barley is the most common food of the horse. If bruised and mixed with chopped straw or hay, it is an excellent provender. But the most common method of giving barley to horses in England is in what is termed a mash. The barley in this case is boiled in water, and the whole is then

allowed to stand until it is sufficiently cool. The mash forms admirable feeding for a sick horse; it keeps the bowels open, and is nutritive, without being heating.

In feeding horses, even when upon hard work, a practice has been introduced of feeding the horse entirely on steamed food, with chopped hay and straw. The proportions of the different kinds of food employed in this manner are not subject to rule. But about ½ in weight of the whole may consist of the chaff of straw, ¼ of the chaff of hay, ¼ of bruised or coarsely ground grain, and ¼ may consist of steamed potatoes. To this should be added about 2 oz. of common salt. From 30 to 35 lbs. of this mixed provender, or on an average 32½ lbs. in 24 hours, will suffice for any horse.

Two methods may be adopted in the giving of this food. Either the whole substances may be mixed together, and a certain proportion given to the horses three or four times in the day; or the dry food alone may be given during the first part of the day, and the steamed food mixed with a portion of the dried food in a mess at night.

In the first case, that is, when the whole mess is to be mixed together, the potatoes or other steamed food are first to be prepared, then weighed and mixed with the chopped straw or hay, and with the bruised oats. The quantity for 24 hours being mixed and prepared, the proportion for each horse is to be weighed and set apart in its proper pail, and given to each horse at three or more times, as shall best suit with the work with which he is engaged, taking care that considerably the largest quantity shall be given at night.

When this method of feeding is adopted upon a farm, it should be confined entirely to the months of winter, for the horses of a farm will always be best and most economically fed during the months of summer on pasture and green forage.

CONTENTS OF THIS NUMBER.

A new year's present of a Silk Manual—Essay on deep ploughing and notice of Mr. Craven's Essay—Mr. Craven's Essay—interesting historical account of the Improved short horn Durhams, embellished with a portrait of Lord Althorp's bull—Professor Low on the horse—advertisements, prices current, &c.

SEEDS AND TREES.

- 100 lbs white Italian mulberry Seed
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	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured....	pound.	11	—
Shoulders,.... do.....	"	10	—
Middlings,.... do.....	"	8½	9
Assorted, country,.....	"	7	8
BUTTER, printed, in lbs. & half lbs.	"	18½	25
Roll,.....	"	20	—
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old....	each.	3 00	6 00
COWS, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 75	1 81
CHOP RYE,.....	"	1 81	1 87
EGGS,.....	dozen.	—	—
FISH, Shad, No. 1, Susquehanna, barrel.	7 75	—	—
No. 2,.....	6 75	—	—
Herrings, salted, No. 1,.....	4 00	4 12½	—
Mackerel, No. 3,.....	5 75	—	—
Cod, salted,.....	cwt.	3 00	35 0
LARD,.....	pound.	10	10

BANK NTOE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	VIRGINIA.
U. S. Bank,.....par	Farmers Bank of Virginia ¾a
Branch at Baltimore,....do	Bank of Virginia,.....do
Other Branches,.....do	Branch at Fredericksburg,do
MARYLAND.	
Banks in Baltimore,....par	Petersburg,.....do
Hagerstown,....½a	Norfolk,.....do
Frederick,.....do	Winchester,.....do
Westminster,.....do	Lynchburg,.....do
Farmers' Bank of Mary'd, do	Danville,.....do
Do. payable at Easton,....do	Bank of the Valley,....do
Salisbury,.... 5 per ct. dis.	Branch at Romney,.... ¾
Cumberland,.....½a	Do. Charlestown,....do
Millington,.....do	Do. Leesburg,.....do
DISTRICT.	
Washington, } Banks, 1.	Wheeling Banks,....1½a2
Georgetown, } Banks, 1.	Ohio Banks, generally 2½a3
Alexandria, } Banks, 1.	New Jersey Banks gen. 1½a2
PENNSYLVANIA.	New York City,....½a
Philadelphia,.....½a	New York State,....2½a3
Chambersburg,.....½a	Massachusetts,....2a2½
Gettysburg,.....do	Connecticut,....2a2½
Pittsburg,.....1½a2	New Hampshire,....2a2½
York,.....½a	Maine,.....2a2½
Other Pennsylvania Bks. 1½a2	Rhode Island,....2a2½
Delaware [under \$5]....3a4	North Carolina,....2½a3
Do. [over 5]....½a3	South Carolina,....2½a3
Michigan Banks,.....5a	Georgia,.....3a3½
Canadian do.....5a	New Orleans,.....4

WHITE TURKEYS.

A few pair of White Turkeys would be purchased at the Agricultural Repository in Light near Pratt street, by
de 29
ROBERT SINCLAIR Jr.
3t.

SAXONY RAMS.

The editor of the Farmer and Gardener has for sale 2 full blooded Saxony RAMS, and 2 ¾ blooded do. These sheep are of a family remarkable for their fine fleece, their wool always commanding the best prices in the market.

ALSO

The bull *Brilliant*, a large sized animal of the Improved Durham Short-horn breed. He is red and white; was got in England, and calved in Frederick county, Md., on the 12th May 1829. His dam was Matchless, got by Favorite, (purchased at the sale of the late R. Colling, a celebrated breeder) son of Favorite, dam by H. Allison's Gray bull, sire Orlando, that died on the passage from Liverpool, out of Rosina, from Yorkshire, that gained the highest prize premium of ten sovereigns at a Cattle show in Manchester, England.
no 3

FOR SALE ON MODERATE TERMS.

THE editor of the Farmer and Gardener has for sale two most beautiful Devonshire Bulls, rising three years of age each, of pure and celebrated blood. Also, one Bull 4 years old, a cross between a full bred Durham bull and a pure Devon cow. This noble animal combines in a remarkable degree the good points of both breeds. To gentlemen of the south who may desire to improve their stocks of cattle, the present is an opportunity rarely to be met with. All letters to the editor upon the subject must be post paid.
de 29

THE SALMAGUNDI,

AND NEWS OF THE DAY.

Embellished with a multitude of Comic Engravings.

A new periodical, of a novel character, bearing the above appellation, will be commenced on the beginning of January, 1836. While it will furnish its patrons with the leading features of the news of the day, its principal object will be to serve up a humorous compilation of the numerous lively and pungent sallies which are daily floating along the tide of Literature, and which, for the want of a proper channel for their preservation, are positively lost to the Reading world. Original wits and humorists of our time will here have a medium devoted to the faithful record of the scintillations of their genius. It is not necessary to detail the many attractions which this journal will possess, as the publisher will furnish a specimen number to every person who desires it—(those out of the city, will forward their orders, postage paid)—and he pledges himself that no exertions on his part shall be wanting to make each succeeding number superior in every respect to the preceding ones.

THE SALMAGUNDI will be printed on large imperial paper, equal in size and quality to that which is at present used for the Gentleman's Vade Mecum. It is calculated that MORE THAN 500 ENGRAVINGS will be furnished to the patrons of this Journal in one year—these, in addition to an extensive and choice selection of Satire, Criticisms, Humour, and Wit, to be circulated through its columns, will form a Literary Banquet of a superior and attractive order; and the publisher relies with perfect confidence on the liberality of the American public, and the spirit and tact with which this expensive undertaking will be prosecuted, to bear him successfully and profitably along with it.

The terms of THE SALMAGUNDI will be TWO DOLLARS per annum, payable invariably in advance. No paper will be furnished unless this stipulation is strictly adhered to. Clubs of three will be supplied with the paper for one year, by forwarding a five dollar note, postage paid. Clubs of seven will be supplied for the same term, by forwarding a ten dollar note. The papers that are sent out of the city will be carefully packed in strong envelopes, to prevent their rubbing in the mail.

THE SALMAGUNDI will be published on alternate weeks—otherwise it would be impossible to procure the numerous Embellishments which each number will contain—and the general interest it will afford must be enhanced by this arrangement.

All orders must come postage paid.

Address, CHARLES ALEXANDER, Athenian Buildings, Franklin Place, Philadelphia.
de 29

THE SILK MANUAL.

JUST published and for sale by Sinclair & Moore and Robt. Sinclair, Jr., at the Maryland Agricultural Repository, Light near Pratt street, Baltimore, a complete Manual of the Silk Culture, in which plain instructions are laid down for the culture of the Mulberry, the feeding of the Silk worms, management of the cocoons, reeling, spinning and dyeing of the Silk. In fine, it is a perfect Manual, and comprises every department of the business. The rules are arranged in so plain and methodical a manner that every one can understand them, and by a very few hours attention become master of the business. It is clearly demonstrated in this Manual, that largely upwards of \$500 may be netted from an acre in the Culture; and it is a singular fact connected with the Mulberry as adapted to the making of Silk, that poor dry, sandy, or gravelly land suits it best, the fabric made from worms fed on leaves raised on such soil, being greatly superior in elasticity and richness of gloss to those grown on rich grounds.

Price—per copy, 50 cents.

Liberal discounts made to the trade.

Printed by Sands & Neilson, N. E. corner of Charles and Market streets.

TO AGRICULTURISTS—The analysis of Soils, marls, mineral waters, and other productions, interesting to those engaged in Agricultural pursuits, is performed with promptness and accuracy, by

TYSON & FISHER, Chemists,
no 3 Druggists, No. 192 Market street, Baltimore.

LEON.

THE splendid bull LEON, is now at Clairmont Nursery, where he will remain a few weeks. He is a full blooded improved Durham short horn, and allowed to be one of the best bred animals in the country. He will serve Cows at \$5 each. He is milk white, with a hide as glossy and soft as satin. For his pedigree, see the advertisement, in which he is offered for sale in this day's paper.
no 3

DEVON STOCK.

THE editor of the Farmer and Gardener can at all times supply orders for Devon Cattle. This breed is so distinguished for their easy keep and docility; the richness of the milk of the cows, and for the activity and sprightliness of the oxen, that they would be admirably suited to the purposes of southern agriculturists.

The happy adaptation of the Devonshire Oxen, for the purposes of the farm, will be understood, when it is stated that 4 oxen have been known to plough 2 acres of ground in a day, and a team of them to trot at the rate of six miles an hour with an empty wagon.

Any person wishing to procure them can be supplied by addressing a letter post paid to the editor of the Farmer and Gardener.
nov 10 4t

FOR SALE.

A DURHAM Short-horn bull 15-16 blood. He is from a fine cow and got by Col. Powel's celebrated bull Monk—now two years old. Price, delivered at York, Pa., \$130.

Letters addressed to the editor post paid, will be attended to.
nov 10 2t

A GREAT BARGAIN.

A full blooded Improved Durham Short-horn bull rising five years old, and his 3 sons from 1½ to 2 years old each, 7-8 bred, has been left with the editor of the Farmer and Gardener for sale. These are first rate animals, and would be sold a bargain, if application be made promptly.

All applications by letter must be post paid.
nov 17 3t.

FOR SALE,

A HEIFER rising a year old, in calf by Leon, with a pedigree which makes her a 15-16ths bred improved Durham Short horn—she is well grown, and prettily marked.—Enquire of the editor.
no 3

RUFFLE OATS,

For seed, may be had at the Maryland Agricultural Repository, Light street, Baltimore, by application to
Dec. 8 JAMES MOORE.

GRIST MILLS.

The subscriber has for sale at the Maryland Agricultural Repository, a few of those effective Grist Mills, so much approved of by gentlemen who have tried them. They are adapted to horse-power, and with ease will manufacture 3 bushels of grain into the most beautiful lively meal in an hour.
Dec. 8. JAMES MOORE.
4t.

STOCK OF IMPROVED SHORT HORN DURHAM.

THE editor of the Farmer and Gardener, Baltimore, has for sale two 7-8 and four 3-4 bred cows, 2 full bred and seven 7-8 bred bulls of the improved short-horn breed. They are all fine animals whether regard be had to their milking or fattening propensities. Their pedigrees are indisputable, all tracing to the British Herd book. They will be sold low for cash, their excellence being considered.—To any person, company, or society, who may want several, a great bargain would be given.

Letters addressed to the editor upon this subject, must be post paid.
nov 10 4t

RUFFIN ON CALCAREOUS MANURES,

SECOND EDITION, just received at this office.
ALSO,
A few pounds of the celebrated SKINLESS OATS, price 50 cents per lb. said to produce 80 bushels per acre.
oc 13 2t.
R. SINCLAIR, jr. Seedsman, connected with this office

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 38.

BALTIMORE, MD. JANUARY 19, 1836.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, JAN. 19, 1836.

The article from our correspondent "*Thorn-ton*," like good wine, needs no bush; its raciness, will commend it to favor.

MORUS MULTICAULIS SEED.

From the repeated applications which have been made to us within the last few weeks for this article, we deem it necessary to the public information, to state, that none can be obtained either in this country or France. Solicitous of promoting the Silk culture, and of enabling those who desired to enter into it to do so at the least possible expense, we were anxious, if practicable, of having a supply of this seed secured, and accordingly induced Mr. Robert Sinclair, Jr. the Seedsman of our concern, to send to France with a view of procuring it, and in order to make assurance doubly sure, we further induced him to interest our Consul General in the business. He accordingly wrote to that gentleman, as also to one of the most distinguished Seedsman in that country—the result of his inquiries, so auspiciously made, is soon told—*No seed of the Morus Multicaulis is to be had in France*—the propagation of the plant, being there, as in this country, by layers and cuttings.

We regret this the more, as it greatly curtails the means of multiplying this most excellent shrub, and tends to add to the expense of providing orchards of it, as the trees, layers and cuttings, come infinitely higher than would the seed. We hope, however, that our Nurserymen will correct this evil, by setting apart a proper proportion of their largest shrubs, expressly for seed; their interest, as well as patriotism would dictate that they should do so. It is impossible that they can supply the demands of the country through the means of the usual appliances of their trade, by layerings and cuttings, and, therefore if no higher motive should influence them than

that of money, that will be present henceforth, to urge them to the discharge of a duty, which as good citizens they owe their country.

Dunning, is, perhaps, the most ungrateful duty, which the proprietors of periodicals have to perform; but unpleasant as it may be, it becomes often necessary—not that the subscribers have any indisposition to fulfil their part of the subsisting obligation; but that, in the multiplicity of business—in the great press of more important concerns—the printer is lost sight of—and lost sight of too, without the least intention to do him injury. To most gentlemen who take a journal, the annual subscription is a matter of no weight; but when the aggregate due a publisher is considered, it will be admitted to be of deep "*pith and moment*." Agreeably to the terms of our paper, the subscription is payable in advance, and although eight months have rolled around, a very large amount is still due us, the want of which we sorely feel, and, therefore, respectfully ask our patrons to remember us in their good acts in the beginning of the new year.

BAKEWELL SHEEP AND FIRST RATE MILCH COWS.

Mr. John Barney being about to retire from his grazing and dairy establishment at Port Penn, Delaware, and having determined to curtail his agricultural operations, has authorised the editor of the *Farmer and Gardener, Baltimore*, to contract for the sale of his stock of sheep and cows, or any part of either. As a breeder of fine animals, no man in this union has enjoyed a higher reputation, nor has any, more trophies of success to point to upon his sideboard. Factitious circumstances sometimes give popularity to individuals in the several pursuits of life. Fortune and opulent connexions, not unfrequently lend their aid to give currency to men without their possessing any just claims to eminence in their peculiar walks: not so with Mr. Barney: his elevated standing as a breeder has been earned by his own merit—by his unwearied application of the true principles of production in the rearing of his animals.

No one who knows any thing concerning the brilliant career of this gentleman as a competitor in the New York, Philadelphia, and Baltimore,

markets, for the palm of victory, for superior mutton, will withhold from his fine sheep that meed of praise they so justly deserve. In each and all of these markets, his sheep have always commanded the very best prices; and, indeed, defied all rivalry. From the beginning, it has been Mr. Barney's object to combine the two desirable qualities of *good mutton* and *superior yield of fleece*, and his ample flock is at this moment a splendid evidence of the triumphant success of his exertions.

The price which Mr. Barney asks, ranges from 25 to 50 dollars per head, as in quality. Among his present flock there are several of the *get* of an imported buck, sold last year by him to General Garrard, of Kentucky, from whose back we have a clip of fleece, which is only necessary to be seen to be admired—it is from ten to twelve inches in length. Speaking of this buck, a letter before us, transmitting the above specimen of wool, to a friend of the writer, in this city, says:

"It is from my imported Bakewell buck; his gross weight 240 lbs.; weight of fleece 12½ lbs.; cost eighty pounds sterling in England, so said his importer. I gave two hundred dollars for him; have been offered three hundred; have engaged his lambs out of ewes from Mr. Barney's stock of the same breed, at \$150; have sold ten of his lambs out of common ewes at \$30 each; he has got a number of ewes at ten dollars each, and will make a big season, together with my own ewes. We have never seen any thing like him in Kentucky."

The other buck from which Mr. Barney bred, is also an imported one, and in a late conversation with that gentleman, he expressed an opinion that his *get* was fully equal to those got by the buck he sold to Gen. Garrard.

The stock of cows which we are authorised to sell, consists of about twenty, comprising perhaps the best collection of deep milkers any where to be found. Among them are 3-4 and 7-8 bred improved Durham short-horns; the celebrated breed known as Simms' imported; crosses between Durham and Devon; the Holstein; and crosses upon those respective breeds, by the French bull, imported, and so much prized by the late Mr. Stephen Girard. It has always been the object of Mr. Barney to breed for *deep milkers*, and the ex-

cellence of his present herd, which we saw a few days since, very happily demonstrates that his judgment has not been at fault. His price is one hundred dollars per head, cash on delivery.

Should any gentleman wish to procure a first rate milch cow, by forwarding the money, he can be supplied without any additional expense, save that of transportation, the commission being paid by Mr. Barney. In every instance, it will be necessary to mention, which of the several breeds described by us the party may desire, and that the postage be paid on all communications addressed to us on the subject.

ENCOURAGEMENT TO SILK GROWING.

The legislatures of Massachusetts, and Connecticut, have passed laws granting bounties of fifty cents on each pound of silk raised and reeled in those states; and several other of the eastern states, have granted similar premiums. The legislature of the state of Vermont, have just passed a law, authorizing and directing the treasurer to pay out of the treasury of the State, the sum of ten cents for each pound of cocoons hereafter raised or grown within this State, as a bonus, or premium, to the person or persons raising the same.

In the legislature of Ohio, bills were pending at the last advices to incorporate a Silk Company, and to encourage the culture of silk. Should not each state in the union follow those good examples?

Those who are not aware of the fact, will be surprized to learn, that at the beautiful village of Poughkeepsie, situated on the North River, there are now being built six factories intended for the manufacture of silk goods.

We insert to-day a most interesting communication from an esteemed correspondent, Mr. Smith, of Dardenne, Missouri, upon the subject of an insect denominated by him the Chinch-bug, whose ravages, it will be recollected, we mentioned in our 34th number, had proved so destructive to the wheat crops of that state during the last year. Mr. Smith has sent us a considerable number of these mischievous insects: they are much smaller, and in shape wholly unlike the bug of the same name which infests beds, and do not belong to the same order. We have conversed with many agriculturists in this part of the country, but have been unable to find a single one that had any previous knowledge of the existence of such an enemy to the grain crops. Its formidable ravages to the wheat fields of Missouri, during the last summer, give to the investigation of the

subject, whether there be an efficient remedy, the most lively interest. The mode in which this little doer of evil effects its mischief, is this—it perforates the stalk, and after gratifying its appetite ceases from its labor, leaving an open wound or aperture, through which the remaining juices escape: thus deprived of their sources of supply, the stalk and leaves wither and die; for no vegetable body can exist after that which maintains its living principle has been abstracted.

The instance mentioned by Mr. Smith, of "30 rows of corn next to a field of wheat being so entirely destroyed by this bug, that no living vestige of its former existence remained, although the corn was near shoulder high when attacked," is indeed a most singularly appalling fact, and should awaken the agricultural community to the necessity of discovering some means either preventive of its ravages, or destructive of the insect itself. The questions which strike us as proper for investigation, are: what are the habits of the insect? how are they propagated? Are their eggs deposited in the ground, or on the grain which forms the favorite object of their attack? In what state do they commit their depredations? By pursuing such investigations with a discreet judgment and persevering industry, some efficient means of security may be fallen upon. If the deposite of the egg be upon the grain, the same precautions of washing, steeping and liming, as are observed in the preparation of grain for sowing, that is suspected of being infected with smut, or the Hessian fly, would prove effectual; but if the deposite be in the earth, the difficulty of destroying the insect in the germ would be greatly increased, because of the impracticability of bringing any substance in contact with them in a state sufficiently caustic to destroy the vital principle. Paring and burning the soil, might probably effect the purpose; but there would be uncertainty in such plan, arising from the difficulty of producing a heat over a large field so fervent as to kill the insect in embryo. And even if it were practicable, so to destroy it, the expense and trouble of such a process would offer a serious objection, if it did not prove insurmountable to its being undertaken. We view this subject as one of deep moment to the agricultural class, and we would, therefore, solicit communications from such farmers and planters as may have any knowledge of the insect in question.

With respect to the dissent to "two general propositions, which are often reiterated in the editorial department" of our paper, by our esteemed correspondent, we have only to say, that we receive his frank and ingenuous demurrers as e-

vidences of his friendly feeling towards us, and of his devotion to the great interest of agriculture, to which we are bound by every tie of affection. But let us see what force there are in the objections assigned by him.

The first proposition is, that "the red clover requires renewing biennially—now certainly this corresponds with the experience of every farmer in this part of the country. That it is a *biennial plant*, no one will pretend to deny; but that a clover field may be continued for an almost indefinite period of years by proper care and treatment, we do not, and never have entertained a doubt. The experience of Mr. Smith, himself, establishes the soundness of our belief; but then as clover fields are treated with us, they emphatically require biennial renewals, because they form an important point in what is termed our rotation of crops, the after math of the second year being ploughed in, and forming the manure for the succeeding crop—and, indeed, with us, nothing proves so salutary, or promotive of a high state of production, as a wheat crop upon a clover lay.

Mr. Smith affirms, that he "laid down a field to clover in the spring of 1823, and it continued to produce annually good and increasing crops ever since, until the last three years, when it seems to have reached its maximum of production, and is yet in a first rate state of productiveness."

Now this is all reconcilable with what we have asserted, and is perfectly consistent with the true principles of vegetable life. With us the plant requires renewal every second year, because it forms one of the most essential means of improving our worn-out soils; and, indeed, lays at the very foundation of our improving system of husbandry. With us, where the season is favorable to the growth of the clover, two crops are frequently cut in one year from the same field, and the stock then turned in to eat down the subsequent growth. Not so with Mr. Smith's field. If we read him correctly, his second math remains undisturbed, and of course, *matures its seed*, which, falling to the earth, is there protected by the vegetable decomposition continually accumulating from the falling leaves and decaying stems of clover, and thus are plants annually renewed from the seed, to take the place of those which biennially die. To *circumstances* then, and not to any perennial character of the clover plant, is Mr. Smith indebted for the long continued productiveness of his clover field, and to the necessity of the case, are we to ascribe the biennial continuance only, of our fields.

There is a fact mentioned by Mr. Smith, connected with the relative condition of his field, that would seem to strike at the philosophy which teaches us, that rotation of crops is essential to the preservation of a healthful action in the soil.

In 1823 he put down his field in clover, it being then exhausted from an incessant course of grain cropping: thirteen years have rolled round, and still his field yields luxuriantly, and has increased in fertility, although during the whole of that time it has grown no other plant but clover.

Mr. Smith's second objection is to our opinion: that grass should be cut for hay when in the flower, and he contends that by letting the timothy grass remain uncut until the heads begin to turn yellow, that 33½ per cent. is added to its weight as well as a large increase of saccharine matter. We are not disposed to question these positions; they may be, and no doubt are, literally true; but nevertheless, we must be indulged in the opinion that hay cut when the grass is in flower, is more fragrant, delicate and acceptable to most animals, than when permitted to grow into the "seer and yellow leaf" before being cut. We said we were not disposed to question the assertion, that by delaying the cutting, an increase of weight would be obtained; it would have been futile for us to have done so, because that question was already accurately settled to our hand by the experiments on grasses made by *George Sinclair*, gardener to the Duke of Bedford, and the following analysis of timothy will shew the precise advantage resulting from deferred cutting:

	lbs. per acre.
Grass cut when in flower,	40,837
when dry,	17,355
nutritive matter,	1,595
	lbs. per acre.
At the time the seed is ripe,	40,837
when dry,	19,397
nutritive matter,	3,668

By the above table, it will be perceived, that, although the *green grass* was at both periods precisely the same in quantity, yet when dried into hay, the grass cut when the seed was ripe, weighed 2,042 lbs. more than that cut when in flower, and that the increase in favor of the former, of nutritive matter, was still more, being 2,072 lbs. This difference is accounted for by the assigned fact, that the nutritive powers of the straw of timothy, exceed those of the leaves, as 28 to 8, and the hay when the seed is ripe, to that of the time of flowering, as 23 to 10, and it is further laid down, that it may be cropped to an advanced period of the season without injury to the quality of the hay.

THE CHINCH BUG.

Dardenne P. O., Mo., Dec. 25, 1835.

MESSRS. EDITORS—Accompanying the 32d No. of the Farmer and Gardener, which is the last received, was a written note requesting a particular description of the chinch bug, mentioned in a former communication; but as I am not a naturalist, and this insect is neither of those mentioned in your note, but different, entirely so, from all others with which I am conversant, and, therefore, if I were to attempt a description, I might fail in giving it a just delineation, I came to the conclusion that the surest method of effecting the desired object, would be to capture some of these little nondescript monsters and forward them to you, if they were obtainable. According to this plan, I set out this evening a little before sun set,

in quest of them, and from my previous knowledge of the habits of the insect, was successful in procuring a considerable number of them, and have enclosed them in an envelope which is enclosed in this letter, the greater number of them are alive and in good sprightly condition, and for fear they might escape, I have secured the edges of the envelope with paste; should the weather continue cold, they will no doubt reach you safely, and should it be warm, I think they will not be able to eat their way out, as their cutters are not designed to operate on such materials; and if they should perish, the skeletons will afford you a better idea of the thing, than any description I can give. The wheat plant is the favourite food of this insect, though not its exclusive food; it attacks the wheat in the stem, and operates on the lower portion of it within a few inches of the ground, and injures, or destroys the crop, (as they appear early or late in the season, or in greater or smaller numbers) by making incisions in the stem through which the juices of the plant are extracted, and the plant is either injured, or entirely destroyed, according to the quantity of sap extracted, and the period at which the attack commences. When the wheat becomes ripe it no longer affords food for this insect, and it either migrates to a neighbouring oat or corn field, and continues to propagate, and commit its depredations on those crops, as long as they can find appropriate food, or until the coldness of the season renders them torpid; or if this alternative be denied them, from the absence of such fields, they remain on the wheat fields, subsisting on such native grasses as grow amongst the stubble; they do not, however, feed on the clover plant, which may be considered a happy circumstance, as clover is an all important item in the productions of the farm. I have seen sometimes from 16 to 30 rows of corn next to a field of wheat, so entirely destroyed by this bug that no living vestige of its former existence remained, although the corn was near shoulder high when attacked.

And now while I am writing, you must allow me the privilege of dissenting from two general propositions, which are often reiterated in the editorial department of your paper: the first of these, is, that the red clover requires renewing biennially, and the second, that grass for hay should always be cut when in flower: from both of these propositions, I dissent in toto. Now for the reasons of this dissent. I have a piece of land that was laid down to clover in the spring of 1823, and has continued to produce annually good and increasing crops ever since until the last three years, when it seems to have reached its maximum of production, and is yet in a first rate state of productiveness, and for several of the last seasons has produced as fine crops as I have ever seen on any sort of land; but I should here remark, that I have never permitted stock to run on this land; whatever has not been taken off in the form of hay or seed, has been permitted to rot on the ground, which was much exhausted before it was set in grass by incessant grain cropping. I also know of a number of other pieces of clover that have been standing 4 or 5 years, and they are still as productive as they ever were.

As to the second proposition, viz: that grass

for hay should always be cut while in flower, it seems strange to me that you should recommend a course in relation to that particular article so diametrically opposite to the course pursued in the raising of all other crops: it is well known to all persons conversant with the subject, that plants of almost every description acquire a large portion of saccharine matter after they come into flower, and as it regards the timothy plant, on which I rely principally for hay, I am satisfied it adds 33 1-3d per cent. to its weight after it commences flowering, and I know both from experience and observation, that timothy cut just as the heads begin to turn yellow, is pound for pound equal, if not superior, to that cut in flower: cutting of plants when in flower is the method recommended by most writers for their eradication: may not this early cutting be the principal reason why your clover crops require renewing so frequently? Yours, respectfully,

JOHN SMITH.

Not being familiar with the subject of *Entomology*, and deeming the establishment of the identity of the insects sent us by our correspondent, important, we submitted them to the inspection of *Gideon B. Smith, Esq.*, the result of whose examination will be found subjoined: and we here take pleasure in tendering him our thanks for the promptness with which he complied with our request.

Should his description meet the eye of any gentleman acquainted with the insects in question, or with any means of preventing their ravages, we would esteem it a favor not only to ourselves, but to the agricultural community, if he would forward us a paper upon the subject.

To the Editor of the Farmer & Gardener:—

SIR,—The insect is about one-eighth of an inch long—some a very little less, and some a little more. Its breadth is one-third of its length, its wings are folded upon its back, and are only perceptible from their color, which is greyish white to the naked eye, and hence they only seem to form a whitish spot, covering two-thirds of the length of the back. The wings are *semi crustaceous*, (hence the insect belongs to the order *hemiptera*.) Its mouth is a rostrum, or long tubular snout, which contains several small hairs, by which it perforates vegetable substances for the purposes of food. When not in use it lies flat upon the breast. Its antennæ are filiform, or thread like. It has six legs, one pair before, and two behind; the foot of each is armed with three hooks; it has four rings to the abdomen, the edges of which, the legs, antennæ, &c. are armed with short hairs. There is no well known insect that resembles it sufficiently near for an illustration of its general appearance. The color to the naked eye is a dark grey or brown; but under the microscope the color is black and shining, and the greyish appearance proceeds from innumerable particles of earthy matter adhering to the surface. Owing to its extreme minuteness, and the dryness of the specimens, I am unable to describe it further. It, however, has no possible title to the name of *chinch* or

chinch bug, no more than it has to that of *June bug*, nor half so much, though it would take one thousand of them to make one of the latter.

So far as my observation extends, I have never seen the insect before, nor can I find any description of it in any book.

Yours, GIDEON B. SMITH.

St. John's, April 11th, 1835.

To the editor of the Farmer & Gardener.

Dear Sir—The communication I made for your valuable paper some months ago having been so favorably received, I am encouraged to continue the intercourse. You call me your "unknown" correspondent, and I hope you will permit me to continue my anonymous character, until a longer (and I hope a successful) course of husbandry, may not make it seem presumptuous in me to be your contributor under my proper signature. In the section of country in which I am making my infant efforts at tillage, for a farmer to know any thing in the way of knowledge beyond the rule of three is considered entirely unnecessary, and if you discover an husbandman who can't write, he excuses himself readily, and he thinks completely, by informing you that "he can't read writing as he is only a farmer"—to try experiments is looked upon as wasting your money upon moonshine, and to acquire information from agricultural writers, would be considered an infallible sign of a visionary empyric, who would certainly be unsuccessful in practice; but to be a writer on the science, a contributor to an agricultural work, would infallibly subject a man to suspicions of mental alienation, and his friends would be urged to incur no delay in applying for a commission of lunacy. Now, sir, surrounded as I am by such discouragements, unsupported by a longer experience than one or two years, spent too upon a farm which was over cropped and in bad condition, and requiring years to bring it to that high state of cultivation of which it is susceptible, and to which I hope it is rapidly marching, you must, and I am sure will, cheerfully excuse my anonymous character.

When, sir, my farm shall "bud and blossom as the rose," and pour forth her exuberant treasures; when no longer shall

"The wolfish winds howl round (my) empty barns," when the true spirit of the "divina gloria ruris" of the georgics shall display itself in the profusion of production; when my works shall show forth that the farmer is better of instruction, I may be the less disposed for concealment.

Here sir, a man would inevitably subject himself to be smiled at for his simplicity, and visionary views, who would acknowledge that he derived any knowledge of tillage from any other source than the practices around him. It is actually the opinion of the intelligent portions of the community, and of the farmers themselves, that any scientific acquaintance with the principles of agriculture, any knowledge of the practices of other nations, or of others than those in one's own immediate neighbourhood, is not only unessential, but decidedly indicative of a deficiency of mother wit. For a man in this section of country, of education, or talents, however extensive his domains, however fertile his lands and favorable his situation, however ample his means

and rich his stock, to engage in the pursuits of agriculture with any other object than employment for leisure or amusement for ennui, would be considered preposterous in the extreme, and preposterous in direct proportion to the eagerness of his purpose and the extent of his operations.—To abandon any occupation which would yield to ceaseless industry, and saving economy, a decent subsistence, for the purpose of engaging under the most flattering circumstances, in the practical operations of husbandry, would be looked upon as equally absurd. Any other knowledge than of the manual occupations of husbandry—the daily routine of the neighborhood, is by universal consent acknowledged to be not only useless but highly detrimental. A contempt for book learning—a distrust of the experience of others which has been committed to writing, is the prevailing sentiment. Our farmers are an industrious, economical, very economical, set of men, who generally succeed by untiring labour, close economy, and an unceasing spirit of acquisitiveness, to accumulate property. They prefer purchasing farm after farm, as many of them do, by denying themselves the luxuries and often the comforts of life, to improving the productiveness of their homesteads. They rate the capabilities of their lands by the crops raised through the ordinary process of farming, and have no confidence in any further improvement. The tillage which will furnish 12 or 15 bushels of wheat, 12 or 15 bushels of rye, 20 or 25 bushels of corn, and a ton and a half or less of hay, and a bushel of clover seed to the acre, is believed to be a fair criterion of the productiveness of good land, and a reasonable return for their labor. Such sir, is a pretty fair picture of the opinions and practices of the farming interest in Pennsylvania. Their substance is increased not by exuberance of production, but by prudence in management, and economy in expenditure. They may have heard of crops occasionally more exuberant than the average yield of their land, and they may have now and then been surprized with it under their own routine, but they yield little faith to its continuance. They may think a crop unusually productive, may owe its exuberance to temporary fertility, extraordinary seasons, or unaccountable luck, but they give no credit to the probability of rendering the ground more continually propitious than they and their fathers have found it. It has often struck me as a strong evidence of the little improvement in the productiveness of the lands of Pennsylvania, amongst the mass of her farmers, that the average crops of the state now, vary but little, if any, from what they were about half a century ago. The celebrated Arthur Young, who was so sedulous an inquirer after agricultural knowledge, from every quarter, opened a correspondence with Gen. Washington relative to the productiveness of the lands of the United States, which he shortly after published to the world.—The General for the purpose of procuring the information desired by Mr. Young, directed inquiries to competent gentlemen in different sections of the country, requiring their opinions upon the subject of his wishes. Their report so far as relates to the interior of Pennsylvania, exhibits a curious uniformity of production of the culture of that early day with the present. They give as the average crop of interior counties, such as

York, Lancaster, Franklin, &c., as follows: wheat 15 bushels, rye 20, barley 25, oats 30, Indian corn 25, potatoes 75. They say, "there are a few instances at York and Lancaster, where between 40 and 50 bushels of wheat have been raised to the acre. The estimate of potatoes is perhaps too low, for when there is reasonable care taken, we may have 100 bushels, and that they had seen one acre produce 400 bushels." (Correspondence of Gen. Washington with Arthur Young, p. 28, &c.) Now any one who would report the average crops of Pennsylvania, of the present day, to be as above stated, would be certainly too near to the truth to be cavilled at. The rye perhaps is too high, and the potatoes too low, but most certainly the retrospect affords but little that is flattering to the agricultural skill of the present period over that of half a century back, and it is manifest that the mass of the farmers of Pennsylvania, have made but slow advances in the cultivation of the earth. The cultivation of the husbandmen of '90 may have been worse than it is at present, for they had the advantage of the tillage of new lands, rich from the hands of nature and teeming with fertility; but on the other hand the estimate stated, is very probably higher than that of our day would justify.—There is, perhaps, displayed an improvement in what are called the lower counties of Pennsylvania, and in Lancaster, particularly, where the lands are generally fine and calculated for the raising of grain. But I would rather place the whole average estimate of the state below than above that of fifty years ago. And even in Lancaster county, which is the brag county of the state, and where farming is conducted with a skill and perseverance superior to what is generally displayed in the other grain growing counties, the average crop of wheat has not raised a particle over the estimate furnished to Gen. Washington for Mr. Young, and though the lands of that county are acknowledged to be the finest in the state, yet their average product of wheat per acre, is three below that of France, nine below that of England, and twenty-five below that of the counties of Middlesex and the Lothians.

In an address delivered in 1822, to the Philadelphia Agricultural Society, by Nicholas Biddle, Esq., of that city (and of whom by the bye may be said, what was so elegantly said by Dr. Johnson, of Goldsmith, nullum tetigit quod non ornavit, "there is nothing that he touches which he does not adorn,") he informs us that, (4 Am. Far. 67) "It was stated two years ago by one of the vice Presidents of this society, that the average crop of wheat in Lancaster, which is considered the richest in the state, did not probably exceed fifteen bushels to the acre. Now the average of all France, is more than eighteen bushels, the average of all England, twenty-four bushels, and in some counties, as Middlesex and the Lothians, forty." This estimate of the relative productiveness of England and France, I am inclined to think, is not overrated, and the statement of the average crop of wheat in Lancaster, corresponds with my own information, procured in conversation with competent farmers in that county. Indeed, Loudon in his late able and invaluable work on agriculture, places the average crop of England at 24, 28 and 32 bushels. He says, speaking of wheat, (Encyclopædia of Ag.,

p. 818 §5047) that "the average produce of Britain has been estimated at 3, 3½ and 4 quarters, and one of the largest crops ever heard of, at 10 quarters, and the least at 1½." According to these estimates then, the average produce of the best cultivated county in Pennsylvania is but three bushels over the least crop ever heard of in Great Britain, and 13 bushels below the present average crop of 28 bushels of that intelligent and highly cultivated county. Mr. Biddle's address already alluded to, was delivered in 1822, and his information was procured from British writers no doubt, though he does not cite his authorities, but however near the truth his estimate may be, that of Mr. Loudon, who is so laborious and pains-taking and an Englishman too, must be preferred. The difference may proceed from the more improved system of husbandry of the English farmers, compared with that of 1822.

Now, sir, I would respectfully inquire, what is the cause of the very great difference, of perhaps one hundred per cent., in the average produce of the wheat crops of Great Britain, and of that of the grain growing soil of the key stone state, and why it is that France exceeds even her most fertile and highly cultivated county of Lancaster, fully one-fifth in productiveness. I am not able just now to refer to sources of information to shew a comparison of the estimated average crops of Britain and France, of former periods; to exhibit the condition of their former productiveness with that of the present day; but any one who knows any thing at all of the agricultural history of those countries, knows that they have been for a long period, in a state of decided and gradual improvement in the knowledge of agricultural science, in the use of agricultural implements, and in attention to their modes of culture. So on the other hand, any one who has investigated the condition of the agriculture of Pennsylvania, will be equally assured that, so far at least as concerning the cultivation of wheat, there has been no improvement any where worth telling of, and that in many parts of the state there has been a decided falling off in the amount of production.

It is not any superiority of the soil, or peculiar aptitude for wheat in the climate of those countries, which place them so far beyond us in growing that essential grain, but an improved mode of culture. Both France and Britain were once most wretchedly farmed, and it is only lately that there has been a decided and manifest improvement in their productiveness. When I say lately, I allude to what has been done in the last half century, a period during which the husbandry of Pennsylvania, or at least of her interior and western counties, has been standing still and in some quarters declining. The condition of the state of agriculture in Scotland, is described as "truly deplorable" at the beginning and middle of the 18th century; the tenantry "benumbed with oppression and poverty," "improvement of every kind totally neglected," and the "landed property of little value;" but that "since the close of the American war in 1782, improvement has proceeded with singular rapidity in every district, and the rental rolls of proprietors have been doubled, tripled, and quadrupled," (Ed. Enc. Art. Ag. p. 125.)—In England, we are told by Loudon, (Enc. of Ag. p. 125,) that "from the restoration to the middle

of the 18th century, *very little* improvement took place either in the cultivation of the soil, or in the management of live stock," and he goes on to say, that "even clover and turnips, (the great support of the present improved system of agriculture,) were confined to a few districts, and at the close of this period were scarcely cultivated at all by common farmers in the northern parts of the Island.

From the "whole article of Husbandry," published by Mortimer in 1706, a work of considerable merit, it does not appear that any improvement was made on his practices till near the end of last century." He alleges (§773) that the most of the inventions for increasing produce and economising labour, have either been introduced, or improved and greatly extended since 1760, and that, "by means of both, the free surplus has been vastly increased for the supply of the general consumption." After detailing the severe shock sustained by the farming interest in Britain, (from the derangement of the currency) since 1815, and the wide spread ruin occasioned by the return to a currency of the precious metals, he sums up the several prominent improvements effected in the agriculture of Britain, upon which he had been expatiating, as follows: "As the leading features of practical agricultural improvement in Britain during the eighteenth century, and to the present time, we may enumerate the following. The gradual introduction of a better system of rotation since the publication of Tull's Horse-hoeing Husbandry, and other Agricultural Works, from 1700 to 1750, the improvement of live stock by Bakewell, about 1770, the raised drill system of growing turnips, the use of lime in agriculture, and the Convertible Husbandry by Pringle & Moore, especially Dawson, about 1765, the improved swing plough by Small, about 1790, and the improved threshing machine by Mirkle, about 1795. As improvements of comparative limited application might be mentioned—the art of tapping springs, or what has been called, El-kington's mode of draining, which seems to have been discovered by Dr. Anderson from principle, and Mr. Elkington by accident, about 1760 or later, and the revival of the art of irrigation, by Boswell, about 1780. The field culture of the potato, shortly after 1750, the introduction of the Swedish turnip, about 1790, of spring wheat, about 1795, of summer wheat, about 1800, and of mangold wurtzel more recently, have, with, the introduction of other improved field plants improved breeds of animals, contributed to increase the products of agriculture, &c." All these prodigious improvements in cultivation and production, and consequent increase of the profits of the proprietors of lands in Great Britain, have arisen since the middle of the last century. And it requires no philosophical examination of the nature of the geology of that country and of this, or meteorological speculations upon the difference of the climate of Britain and of Pennsylvania, to show that the rapid and wonderful increase of the wheat crops of the former, and the stationary or declining crops of the other, is not attributable to the soil or the weather. Whilst our lands more than half a century ago, were producing what they are producing now, the average product of

wheat in Great Britain, was probably no more and perhaps less, and now, whilst that country has increased her production of that grain, up to perhaps 28 bushels per acre, on an average, the State of Pennsylvania, with a soil equally fertile by nature, and a climate more propitious, has scarcely, if at all, improved.

We observe the same progressive improvement in the Husbandry of France. Chaptal observes that the agriculture of that country, in 1819, as compared with 1789, presents the most astonishing improvements, but that it is far from having reached perfection, and recommends new plans of improvement, and the introduction of greater quantities of live stock. Still, though the agriculture of France (in despite of their genial climate and fertile soil) is represented by Jacobs in his Report on the Agriculture of Europe, as represented in 1828, occupied one of the lowest ranks in the north of Europe—her average product of wheat is at least one fifth over that of the most cultivated and fertile county of Pennsylvania.

If you will permit me, I will take the liberty through your paper on some future day, of enquiring into the causes of our manifest backwardness in the cultivation of the earth.

Yours, &c. THORNTON.

[From the Farmer's Register.]

USES AND CULTURE OF RUTA BAGA.

The Swedish turnip, or ruta бага, is a most valuable vegetable for all kinds of cattle. Some horses refuse it, but generally they are fond of it. When designed for horses, the roots should be well washed and chopped up—but for cows or hogs this is unnecessary. Indeed it is thought that cows thrive better upon the roots in their dirty state; and when given whole, they are not so likely to choke them. The teeth of sheep may be injured by roots in very dirty condition—but all these cattle eat more slowly and securely, I think, if the turnips are thrown to them in an undivided state. I used a turnip cutter when I first began to feed them, but discontinued it as troublesome and unnecessary.*

The Swedish turnip, when first eaten by milch cows, gives the milk and butter a flavor something like that of garlic. This is not unpleasant to

*Note by the Editor of the Farmer and Gardener.—By whom is it thought that cows thrive better upon the roots in their dirty state? Dirt or filth never yet contributed to the health of man or beast—hogs may thrive by wallowing in the mire, but a cow would fatten but indifferently well upon dirt or filth of any kind. Dirt we all know is indissoluble, and, therefore, cannot be converted into nutrition. If any body ever thought that roots were better for cows in their dirty state, than when washed and clean, it must have been Mr. Idleness. The discontinuance of a turnip cutter because of its being "troublesome and unnecessary," savors so much of that spirit of inertia that has palsied the energies of thousands, impoverished fine estates, and driven men exiles from their native homes, that we have no patience to comment upon such pernicious practices. The turnip cutter in an hour can be made to prepare food enough for twenty cows, and yet it is too much trouble!—nonsense!!!

some persons, and becomes less obvious as the digestive organs of the cattle more perfectly assimilate the food. It may be obviated, however, by dissolving an ounce of saltpetre in a pint of water, and putting a table spoonful of the solution into each milk pan as the warm milk is emptied into it.

In the winter season, the butter from cows judiciously fed upon ruta бага, has the flavor and appearance of grass butter. Half a bushel per day, divided into three messes, is a fair allowance. I have sometimes fed a bushel and a half to each cow per diem. The vegetable is very grateful to the animal, which while eating it, requires little water to drink. I have known cows refuse to drink water for several weeks when freely fed on Swedish turnips. Straw, corn fodder, or coarse hay, is at the same time essential to enable them to chew the cud.

The skin remained sleek, and the health more vigorous and decided, by the use of these turnips; and the amount of barnyard manure is much increased. It is best to feed twice or thrice a day. In fattening cattle, Swedish turnips, sprinkled with corn meal,* gives the meal a finer quality, juice and relish. It is also an economy where corn is high in price.

The ruta бага is generally thought to be a troublesome crop; and many relinquish its cultivation from the difficulty of its management, *when not thoroughly understood*. The ploughing or ridging, drilling, hand-hoeing, and care, are peculiar; and much unnecessary labor and pains often at first embarrass the cultivator. But when once well comprehended, the crop is usually estimated highly.

We generally plough up a barley, wheat or rye stubble, immediately after harvest; then roll and harrow it well. If we have fine manure, (we often use street dirt and bones,) this is hauled out and spread, and the ridges (two furrows cast together) are ploughed at once. These are rolled flat, and the seed drilled upon the top of them with a machine (a turnip drill) contrived for the purpose, or a porter bottle with a quill fixed in the cork, having a hole of sufficient size in the small end of the quill. If the manure is long, and intractable, the ridges are ploughed first, the dung is then carted and spread between them, and double furrows are afterwards split, so as to cover in completely the long manure. The seed is sown tolerably thick. When the plant has four leaves, the supernumeraries are cut out with hand hoes, leaving the finest plants from six to twelve inches asunder. Eight inches is the average width between the plants: if they are allowed to stand thick, the crop is ruined, and no fear should be entertained to cut out freely.

Before hoeing, a light triangular harrow is run between the rows to level the earth, and clear the ground from weeds. An implement with a slide behind and hinges in the front, so that the width can be changed at pleasure, according to the growth is most convenient.

A mistake is often made with the turnip crop, in *killing up* the roots by plough or hoe. The earth, on the contrary, should always be taken from the turnip. Its tap root is quite sufficient for its nourishment, and the bulb grows larger as

the earth is *drawn from* it. The calculation is to hoe and cultivate the ground until it is quite level, harrowing or horse-hoeing between the rows, and hand-hoeing between the growing turnips. We sometimes sow barley, wheat or rye among the ruta бага for a permanent crop, and cover in the seed when we give the turnips the last dressing with the harrow or horse-hoe. I have seen very good crops of grain after the turnips, and three hundred bushels of turnips per acre. In planting Swedes for seed, care should be had that no other plants of the same family be permitted to flower near them, or in the same garden. Other kinds of turnips, cabbage, and radishes will change the character of the seed; and of course, the quality of the roots will be subsequently altered from that of the original. A friend, G. H. Walker, of Hongford, Philadelphia County, who is exceedingly careful in all such matters, promises me to forward you some of the true breed, which you will do me a favor by distributing among our friends on James River, especially to George E. Harrison and John A. Selden, his brother Miles D. Selden, and Hill Carter, Esqrs.

In your climate, except in very severe winters, like the last, you have the advantage of being able to leave the turnips in the field, to be pulled as they are wanted for use. Here we are obliged by the severity of the season, to pull and top them by the middle of November, and to hoard them away in cellars or caves, where they sometimes heat, and require much handling.

You can sow later than we do, for the plant is one of the cold climate, and grows rapidly after the first frosts. I am, however, now [June 30] eating ruta бага raised this spring in my garden by mistake; the seed being sown instead of Savoy cabbage. I find them very palatable.

This turnip bears something the character of the pippin apple, which increases in sweetness and flavor by being kept. When the Swedish turnip is first taken from the ground in autumn, it has a raw or rank taste, when prepared for the table; but towards the middle of winter, it improves very much. It is now sought after in our markets, often selling for 50 cents per bushel, for the use of the tables, in mid-winter and spring.

Its color is a fine rich looking yellow when boiled, and the only objection I know to it, is, that during the process of cooking, it gives out an unsavory odour. This is of less importance when the kitchens are separated from the dwellinghouse.

J. H. GIBSON.

Philadelphia County, July 2, 1835.

[From the Northampton Courier.]

THE PRODUCT OF SILK WORMS.

Silkworms were first known in America about the year 1620. In the reign of King James I. of England, eggs of the silkworm and mulberry seed were sent to the southern section of North America, then called Virginia. To encourage the culture of the mulberry, grants of land were made to settlers in Georgia, on condition of setting out or planting 100 white mulberry trees to every ten acres of cleared land, and considerable silk was made from heavy cocoons, 200 of which were said to weigh a pound. The *morus multicaulis* was then unknown in Europe and America; but the white mulberry was cultivated, and

silk made north of the Potomac, long before the revolution; and many ladies manufactured and wore dresses of American silk.

In the year 1770, Susanna Wright, of Lancaster County, Pa., made a piece of silk from her own cocoons, measuring sixty yards, which in that day was highly commended—since which time, the manufacture has been gradually, but slowly progressing to the present time, and has now, we trust, received such an impulse, that our *granite hills* and pine plains, shall in due time, rival even the *celestial Kingdom of China*, in the product of silk; and with the intelligence, industry and aid of yankee machinery combined, not many years hence, leave Chinese enterprise far in the rear. But in return and in exchange for the plant and seed of the *morus multicaulis*, we will send to China, the *seeds* of moral culture and the *Tree of Life*, which shall make wise unto salvation.

At the suggestion of President Stiles, of Yale College, Dr. Aspinwall introduced the mulberry and manufacture of silk into New England, and established the culture of the mulberry at Mansfield and New Haven, and some 50 or 60 years since, presented President Stiles, with a *toga* or scholastic gown, the product of American silk, which the President delighted to wear, and exhibited as a specimen of the rising manufacture of our country, and which at some future day, he foresaw, would become a staple manufacture of New England—the day now begins to dawn upon the valley of the Connecticut.

Northampton, for more than half a century, has been known to have patronized the culture of the white mulberry and manufacture of silk on a limited scale, under the untiring exertions of the late Joseph Clark, who, from year to year, fed and nurtured the silkworm, and manufactured silk, in anticipation of its future success.

President Stiles, Aspinwall, Clark, and a few *choice spirits* of New England, were but pioneers of the silk cause; which sooner or later must extend over our beloved country. There is now a lady living in this town, who assisted Mr. Clark in the process of manufacturing silk, and within a few days has presented a sample, and exhibited a garment of silk, which she spun at the house of Mr. Clark, some 40 or 50 years since. The garment, like the *Vicar of Bray* in the song, has been made to conform to the fashion of different ages, and worn under different colours. The silk was first made into an elegant cloak, and thus worn during the fashion of the day—it then received a different colour and was altered to a *pelisse* and worn as such during the rage of the fashion; and then again, altered into a *cloak*, and is now worn as such by the *very lady* who spun the silk of which it is made, and is yet a *firm and stout* article, appearing capable of being worn another *half century*—a sample of which may be seen at the office of D. S.

NORTHAMPTON, Nov. 1835.

[From the New York Cultivator.]
COB MEAL.

SHREWSBURY, N. J. 6TH MO. 27TH, 1835.

Jesse Buel.—Respected Friend—From the favorable observations of intelligent persons relating to the use of corn and cobs ground together as food for cattle, I have had a cast iron mill re-

*Does he mean that the meal shall be sprinkled over the turnip in its unwashed state?—Ed. Far. & Gardener.

cently put up for the purpose of crushing them. Not having noticed any remarks on the subject in the Cultivator, I shall yet be glad to avail myself of thy experience and judgment as to the best mode of preparing and feeding such meal. I do not wish the pages of your usefule paper occupied with that which is interesting only to myself or to a few of its readers—but if the use of the corn cob as food for cattle is of sufficient general interest to give an article upon it, I for one shall be gratified to learn if it be better to grind them alone with the corn, or to mix oats in the hopper, should the meal be fed dry, or wet, separately, or mixed with cut hay, cut straw or cut stalks; at what times and in what quantities?

A pretty extensive feeder for the Philadelphia market once told me, that a bushel of meal made of corn and cobs was quite equal to a bushel of meal made of corn and oats, that his cattle thrived as fast on the former, and that they never stalled (cloyed) on it.

I use the present opportunity to bespeak a sufficient quantity of thy "Dutton" seed corn to plant 12 acres the next season, say, 2 1-2 hushels shelled. With much respect, thy friend,

ROBERT WHITE, Jr.

In confirmation of the great economy in preparing food for animals, one of the aldermen of New York city told me, that at the public yard, where the previous year they had fed out hay and oats whole by the cutting of the hay and grinding of the oats, 8 bushels oats and 15 cwt. of hay fed the same number of horses, doing the same work, the same length of time, and kept them in as good order, as 24 bushels of oats and 35 cwt. of hay had done when fed whole!!

REMARKS OF THE CONDUCTOR.

The cobs of corn undoubtedly contain much nutriment. P. Minor, of Virginia, [See Am. Far. Vol. 1, p 324] has given us the results of a nicely conducted experiment to ascertain the amount of this nutriment. He took ten bushels of corn and cob, weighing 367 lbs. and ten bushels of shelled corn, and subjected them to the process of distillation. The product of the corn and cob was 13 gallons of spirits, and of the pure corn 18 gallons. Estimating that the ten bushels of corn and cob would have given five bushels of shelled corn, which is the general proportion, there will be left, as the product of the five bushels of cobs, four gallons of spirit, or nearly half as much as was afforded by five bushels of corn. Mr. Minor remarks that the cob affords other nutritive matter than the saccharine, which is converted into alcohol, as mucilage and oils. We have besides abundant testimony, in the practice of eminent farmers, of the utility of feeding cob-meal to animals, always mixed, we believe, with meal of the corn or oats. Cob-and-corn meal is improved by scalding, still more, for hogs, by boiling, with potatoes, apples and pumpkins, and, yet more by a partial fermentation. All these preparations facilitate digestion. An animal high fed with raw grain, whether horse, hog or ox, voids much of its food in an undigested state, which is of course lost for all beneficial purposes. Grinding grain for animal food, therefore, is universally admitted to be economical, and cooking and partially fermenting it, it is no less true, further enhances its value for swine. Even the water in which it is cooked augments its nutritious pro-

perties, in consequence, probably, of some chemical change effected by the boiling operation. Fish subsist in pure water, as is strikingly illustrated in the management of the gold fish. The experiments of the Rev. H. Colman, in fattening swine further warrant this operation. "At first," says this nice observer, "we employed half a bushel of Indian meal to make a kettle full of hasty pudding; but we soon found that a peck of meal by taking up all the water it could be made to absorb, in a thorough boiling, would make the same kettle full (holding five pails) of sufficient consistency." In giving cob-meal to horses and neat cattle, that are fed with cut hay or straw, there is a double advantage, at least so it is stated by those who are well experienced, in feeding the grain and hay together. The grain, especially corn, is sometimes too heating to horses, and this tendency is counteracted by the stimulus of distension, afforded by the hay and straw. Mixed feed of this sort may be fed thrice in 24 hours. It is eaten in so short a time as to afford much beneficial rest to the animal. We would call the reader's attention to the facts stated in Mr. White's postscript.

FRENCH AFFAIRS.

From the New York Journal of Commerce.

IMPORTANT.—We have had access to letters from France, written by persons holding such political stations as entitle them to all the consideration of official organs. They say that the French Ministry will not permit any degree of resentment or other passion to enter into their measures towards the United States, and will do nothing except for the promotion of the best interests of France. That (contrary to what has been so often said,) they will not commence hostilities on account of any measure on the part of the United States, which is short of actual aggression, not even a non-intercourse, and will, under no circumstances, strike the first blow. Farther, that even though General Jackson should use insulting language, or recommend hostile measures, no notice will be taken of it by the Government of France; that the indemnity money will be paid on receipt of any communication which can, upon the most liberal interpretation, be construed as a compliance with the provision of the bill of appropriation,—and even should no explanation be received during the administration of General Jackson, the money will be remitted to this country immediately on his successor's coming into office. If on the other hand, the United States should commence a war, France will go into the combat with all her resources. The writers of these letters evidently anticipated a very warlike Message from the President at the opening of Congress; so much more so than they will find it to be, that the most intelligent French gentlemen here feel no doubt that the Message will be received as satisfactory.

THE MARKET.—Stocks are all up to day, on account of the news from Europe, and the peaceful opinion is decidedly more prevalent. Flour is dull and lower, fair brands of Western have been sold and is selling at \$7,25a7,29; common Southern \$7 a 7,25. Corn dull at 87½ a 90 c. for Jersey and the best Southern. The common qualities of Cotton are offering about ½ cent lb. lower, but there are no buyers as yet.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,	bushel.	2 50	
CATTLE, on the hoof,	100lbs.	5 00	6 00
CORN, yellow,	bushel.	new	72a74
White,	"	do	68a70
COTTON, Virginia,	pound.	18½	
North Carolina,	"		
Upland,	"	18½	20
FEATHERS,	pound.	37	40
FLAXSEED,	bushel.	1 25	1 37½
FLOUR & MEAL.—Best wh. wh't fam	barrel.	8 00	8 50
Do. do. baker's,	"	7 50	8 00
Do. do. Superfine,	"	7 00	
SuperHow. st. in good de'd	"	6 75	
" " wagon price,	"	6 62	
City Mills, extra,	"	6 75	7 00
Do.	"	6 75	
Susquehanna, firm & scarce	"	6 75	
Rye,	"	5 00	5 25
Kiln-dried Meal, in hhds.	hhd.	19 50	20 00
do. in bbls.	bbl.	4 37	4 50
GRASS SEEDS, red Clover,	bushel.	5 00	5 75
Timothy (herds of the north)	"	2 75	3 25
Orchard,	"	2 25	3 00
Tall meadow Oat,	"	2 00	2 50
Herds, or red top,	"	1 00	1 25
HAY, in bulk,	ton.		15 00
HEMP, country, dew rotted,	pound.	6	7
" water rotted,	"	7	8
Hogs, on the hoof,	100lb.	7 00	7 50
Slaughtered,	"	7 00	7 50
HOPS—first sort,	pound.	12½	
second,	"	10	
refuse,	"	8	
LIME,	bushel.	33	35
MUSTARD SEED, Domestic,	"	5 00	6 00
OATS,	"	42	45
PEAS, red eye,	bushel.		
Black eye,	"		1 25
Lady,	"		
PLASTER PARIS, in the stone,	ton.		5 50
Ground,	barrel.	1 25	
PALMA CHRISTA BEAN,	bushel.	2 00	
RAGS,	pound.	3	4
RYE,	bushel.	88	90
Susquehannah,	"	none	
TOBACCO, crop, common,	100 lbs	5 00	5 50
" brown and red,	"	5 00	7 00
" fine red,	"	7 00	9 00
" wrappery, suitable	"		
for segars,	"	5 00	10 00
" yellow and red,	"	6 00	8 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality, ..	"	4 75	5 00
" ground leaf, ..	"	5 00	8 00
Virginia,	"	6 00	
Rappahannock,	"		
Kentucky,	"	8 00	14 00
WHEAT, white,	bushel.	1 40	1 45
Red,	"	1 35	1 40
WHISKEY, 1st pf. in bbls. }	gallon.	37	37½
" in hhds. }	"	33½	
" wagon price,	"	30	bbls.
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 50	
To Wheeling, ..	"	1 75	
Wool, Prime & Saxon Fleeces, ...	pound.	55 to 68	30 to 32
Full Merino,	"	48 55	28 30
Three fourths Merino,	"	45 48	26 28
One half do.	"	40 45	24 26
Common & one fourth Meri.	"	36 40	22 24
Pulled,	"	38 40	23 24

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BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured....	pound.	11	—
Shoulders,.... do.....	"	10	—
Middlings,.... do.....	"	8½	9
Assorted, country,....	"	7	8
BUTTER, printed, in lbs. & half lbs.	"	18½	25
Roll,.....	"	20	—
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old....	each.	3 00	6 00
Cows, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 75	1 81
CHOP RYE,.....	"	1 81	1 87
EGGS,.....	dozen.	—	—
FISH, Shad, No. 1, Susquehanna, barrel.		7 75	—
No. 2,.....	"	6 75	—
Herrings, salted, No. 1,.....	"	4 00	4 12½
Mackerel, No. 3,.....	"	5 75	—
Cod, salted,.....	cwt.	3 00	35 0
LARD,.....	pound.	10	10

BANK NTOE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,.....par	VIRGINIA.
Branch at Baltimore,.....do	Farmers Bank of Virginia 2½a
Other Branches,.....do	Bank of Virginia,.....do
MARYLAND.	Branch at Fredericksburg do
Banks in Baltimore,.....par	Petersburg,.....do
Hagerstown,.....½a	Norfolk,.....do
Frederick,.....do	Winchester,.....do
Westminster,.....do	Lynchburg,.....do
Farmers' Bank of Mary'd, do	Danville,.....do
Do. payable at Easton,....do	Bank of the Valley,....do
Salisbury,.... 5 per ct. dis.	Branch at Romney,....½
Cumberland,.....½a	Do. Charlestown, do
Millington,.....do	Do. Leesburg,....do
DISTRICT.	Wheeling Banks,....1½a2
Washington, } Banks, ½.	Ohio Banks, generally 2½a3
Georgetown, } Banks, ½.	New Jersey Banks gen. 1½a2
Alexandria, } Banks, ½.	New York City,....½a
PENNSYLVANIA.	New York State,....2½a3
Philadelphia,.....½a	Massachusetts,....2a2½
Chambersburg,.....½a	Connecticut,....2a2½
Gettysburg,.....do	New Hampshire,....2a2½
Pittsburg,.....1½a2	Maine,.....2a2½
York,.....½a	Rhode Island,....2a2½
Other Pennsylvania Bks. 1½a2	North Carolina,....2½a3
Delaware [under \$5]....3a4	South Carolina,....2½a3
Do. [over 5]....½a2	Georgia,....3a3½
Michigan Banks,.....5a	New Orleans,.....4
Canadian do.....5a	

WHITE TURKEYS.

A few pair of White Turkeys would be purchased at the Agricultural Repository in Light near Pratt street, by
de 29
ROBERT SINCLAIR Jr.
3t.

SAXONY RAMS.

The editor of the Farmer and Gardener has for sale 2 full blooded Saxony RAMS, and 2 ¾ blooded do. These sheep are of a family remarkable for their fine fleece, their wool always commanding the best prices in the market.

ALSO

The bull *Brilliant*, a large sized animal of the Improved Durham Short-horn breed. He is red and white; was got in England, and calved in Frederick county, Md., on the 12th May 1829. His dam was Matchless, got by Favorite, (purchased at the sale of the late R. Colling, a celebrated breeder) son of Favorite, dam by H. Allison's Gray bull, sire Orlando, that died on the passage from Liverpool, out of Rosina, from Yorkshire, that gained the highest prize premium of ten sovereigns at a Cattle show in Manchester, England.
no 3

FOR SALE ON MODERATE TERMS.

THE editor of the Farmer and Gardener has for sale two most beautiful Devonshire Bulls, rising three years of age each, of pure and celebrated blood. Also, one Bull 4 years old, a cross between a full bred Durham bull and a pure Devon cow. This noble animal combines in a remarkable degree the good points of both breeds. To gentlemen of the south who may desire to improve their stocks of cattle, the present is an opportunity rarely to be met with. All letters to the editor upon the subject must be post paid.
de 29

THE SALMAGUNDI,

AND NEWS OF THE DAY.

Embellished with a multitude of Comic Engravings.

A new periodical, of a novel character, bearing the above appellation, will be commenced on the beginning of January, 1836. While it will furnish its patrons with the leading features of the news of the day, its principal object will be to serve up a humorous compilation of the numerous lively and pungent sallies which are daily floating along the tide of Literature, and which, for the want of a proper channel for their preservation, are positively lost to the Reading world. Original wits and humorists of our time will here have a medium devoted to the faithful record of the scintillations of their genius. It is not necessary to detail the many attractions which this journal will possess, as the publisher will furnish a specimen number to every person who desires it—(those out of the city, will forward their orders, postage paid)—and he pledges himself that no exertions on his part shall be wanting to make each succeeding number superior in every respect to the preceding ones.

THE SALMAGUNDI will be printed on large imperial paper, equal in size and quality to that which is at present used for the Gentleman's Vade Mecum. It is calculated that MORE THAN 500 ENGRAVINGS will be furnished to the patrons of this Journal in one year—these, in addition to an extensive and choice selection of Satire, Criticisms, Humour, and Wit, to be circulated through its columns, will form a Literary Banquet of a superior and attractive order; and the publisher relies with perfect confidence on the liberality of the American public, and the spirit and tact with which this expensive undertaking will be prosecuted, to bear him successfully and profitably along with it.

The terms of THE SALMAGUNDI will be two DOLLARS per annum, payable invariably in advance. No paper will be furnished unless this stipulation is strictly adhered to. Clubs of three will be supplied with the paper for one year, by forwarding a five dollar note, postage paid. Clubs of seven will be supplied for the same term, by forwarding a ten dollar note. The papers that are sent out of the city will be carefully packed in strong envelopes, to prevent their rubbing in the mail.

THE SALMAGUNDI will be published on alternate weeks—otherwise it would be impossible to procure the numerous Embellishments which each number will contain—and the general interest it will afford must be enhanced by this arrangement.

All orders must come postage paid.

Address, CHARLES ALEXANDER, Athenian Buildings, Franklin Place, Philadelphia.
de 29

THE SILK MANUAL.

JUST published and for sale by Sinclair & Moore and Robt. Sinclair, Jr., at the Maryland Agricultural Repository, Light near Pratt street, Baltimore, a complete Manual of the Silk Culture, in which plain instructions are laid down for the culture of the Mulberry, the feeding of the Silk worms, management of the cocoons, reeling, spinning and dyeing of the Silk. In fine, it is a perfect Manual, and comprises every department of the business. The rules are arranged in so plain and methodical a manner that every one can understand them, and by a very few hours attention become master of the business. It is clearly demonstrated in this Manual, that largely upwards of \$500 may be netted from an acre in the Culture; and it is a singular fact connected with the Mulberry as adapted to the making of Silk, that poor dry, sandy, or gravelly land suits it best, the fabric made from worms fed on leaves raised on such soil, being greatly superior in elasticity and richness of gloss to those grown on rich grounds.

Price—per copy, 50 cents.

Liberal discounts made to the trade.

Printed by Sands & Neilson, N. E. corner of Charles and Market streets.

TO AGRICULTURISTS.—The analysis of Soils, marls, mineral waters, and other productions, interesting to those engaged in Agricultural pursuits, is performed with promptness and accuracy, by

TYSON & FISHER, Chemists,
no 3 Druggists, No. 192 Market street, Baltimore.

DEVON STOCK.

THE editor of the Farmer and Gardener can at all times supply orders for Devon Cattle. This breed is so distinguished for their easy keep and docility; the richness of the milk of the cows, and for the activity and sprightliness of the oxen, that they would be admirably suited to the purposes of southern agriculturists.

The happy adaptation of the Devonshire Oxen, for the purposes of the farm, will be understood, when it is stated that 4 oxen have been known to plough 2 acres of ground in a day, and a team of them to trot at the rate of six miles an hour with an empty wagon.

Any person wishing to procure them can be supplied by addressing a letter, post paid, to the editor of the Farmer and Gardener.
nov 10 4t

FOR SALE.

A DURHAM Short-horn bull 15-16 blood. He is from a fine cow and got by Col. Powell's celebrated bull Monk—now two years old. Price, delivered at York, Pa., \$130.

Letters addressed to the editor post paid, will be attended to.
nov 10 2t

SEEDS AND TREES.

100 lbs white Italian mulberry Seed
1200 do dark red Onion
400 do early pale red do
500 do large yellow do
400 do early large white silver skin'd do. very superior, and a far more sure crop than any other white variety.
2500 do Cabbages of all the choicest kinds
2250 do Beets do do
450 bushels Peas do do
300 do Beans do do

Also, every other choice variety of Garden Seeds, all the growth of 1835, and venders and others will be supplied at very moderate rates, and a convenient credit.

A very large stock of Grass Seeds of every description, a few pounds of very large Teazel Seed, and all the choice new varieties of Potatoes, &c.

Chinese and Italian mulberry Trees of various sizes by the hundred or thousand. Also a hundred thousand cuttings perfectly prepared for planting.

Priced catalogues, both wholesale and retail, will be sent to every applicant. WM. PRINCE & SONS,
Linnæan Garden & Nurseries, Flushing, near New York.
ja 12 3t

FOR SALE,

A HEIFER rising a year old, in calf by Leon, with a pedigree which makes her a 15-16ths bred improved Durham Short horn—she is well grown, and prettily marked.—Enquire of the editor.
no 3

RUFFLE OATS,

For seed, may be had at the Maryland Agricultural Repository, Light street, Baltimore, by application to
Dec. 8 JAMES MOORE.

GRIST MILLS.

The subscriber has for sale at the Maryland Agricultural Repository, a few of those effective Grist Mills, so much approved of by gentlemen who have tried them. They are adapted to horse-power, and with ease will manufacture 3 bushels of grain into the most beautiful lively meal in an hour.
JAMES MOORE.
Dec. 8. 4t.

STOCK OF IMPROVED SHORT HORN DURHAM.

THE editor of the Farmer and Gardener, Baltimore, has for sale two 7-8 and four 3-4 bred cows, 2 full bred and seven 7-8 bred bulls of the improved short-horn breed. They are all fine animals whether regard be had to their milking or fattening propensities. Their pedigrees are indisputable, all tracing to the British Herd book. They will be sold low for cash, their excellence being considered.—To any person, company, or society, who may want several, a great bargain would be given.

Letters addressed to the editor upon this subject, must be post paid.
nov 10 4t

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 39.

BALTIMORE, MD. JANUARY 26, 1836.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**,

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American Farmer Establishment.

BALTIMORE: TUESDAY, JAN. 26, 1836.

In our 35th number we gave an article communicating the fact of the formation of a company in Queen Ann's county, in this state, for the purpose of carrying on the silk culture, and expressing the undissembled pleasure we felt at the information, and it will be seen by the article appended to this, that some patriotic citizens of the adjoining county of *Caroline*, are about to form another company with a similar object in view. To them we say, as we said to the public spirited gentlemen of the first named county, may God speed your good work; for good must that work be, that sets an example, which, if followed, will add millions to the productions of the state, and increase the means of living to its people, to an amount more than equal to all their wants, necessary or artificial.

Whilst we rejoice in the fulness of our heart at these auspicious beginnings near home, we say to the citizens of every district in the country, where there are genial soils and sun—and where are they not—to emulate the example here set them; they need not fear a glutted market—the markets of America, England and France, are all open, and offer the richest rewards which the husbandman could desire to urge him forward in this generous enterprise: nor should the present demand for raw silk, be taken as any criterion of what it may, by time and circumstances, be raised to. As the means of production and the supply may be augmented, so will the demand be increased. As each year rolls around, new uses will be found for the commodity, until at last, it will be used in a hundred ways not at present thought of. Already have the ever inventive genius of our mechanics substituted it to considerable extent for fur in the fabrication of hats, and as civilization forces its way to the distant west, and as the forests fall beneath the unerring stroke of the axe-man, will the supply of fur become diminished, and the consequent increase

of the use of silk in the manufacture of hats be promoted.

What are the facts connected with the history of the growing of cotton in the United States? Who, a quarter of a century ago would have believed that it would have attained one hundredth part of the present amount of product and consumption. The demand has regularly kept pace with the rate of production, and this has been done without any diminution of pound value. Indeed the whole range of incidents involved in the culture of this beautiful and necessary article, are as extraordinary as they are interesting and instructive. And we would here invoke all who may desire to do an especial favor to themselves and to their country, to take counsel by the successful results of the culture of cotton, and enter at once with energy and spirit into that of the more profitable commodity of silk.

When we took pen in hand, we had merely intended to introduce this article with a view of shewing how the good work prospers; but we find we have written an article.

[From the *Centreville Times*.]

“Any remarks we might feel disposed to make concerning the enterprise of the Q. Ann's Silk company, are superseded by those of the editor of the *Farmer and Gardener*, copied into our paper to-day.

We will say however, that the undertaking was projected by the Hon. Judge Hopper and Dr. J. K. Harper of C. Ville, who have by this single act endeared themselves to the company and to the public generally, and we have every reason to believe the company's views will be crowned with the most happy results, if properly pursued. Companies for raising silk are springing up in every section of our country—some, like our own are yet in the infancy of effort; others, having approached nearer maturity, are already reaping a golden harvest, which we believe is in reserve for all.

“We learn, that some spirited citizens of *Caroline* county, have likewise projected a silk Company—Good speed.”

Since we penned our article, we are happy to perceive by the proceedings of the Legislature of Maryland, that the Queen Ann's county Silk Company has been chartered; we hope, however, the legislature will not stop at that one good act, but go forward and adopt such wholesome enactments as will give assurance of form and pressure to the silk business in Maryland.

With our friend of the *Centreville Times*, we tender the homage of our respect to Judge *Hopper*, and Dr. *Harper*, who as pioneers in this thrice glorious work deserve the lasting gratitude of the people of the state, and unless we have been greatly deceived in our estimate of the value of the business they have been the means of introducing into Queen Ann's county, they will be cherished as benefactors of the land. Certain we are, that if good deeds entitle men to live in the affections of their countrymen, their names will be held in reverence while our mountains bloom or rivers flow.

AGRICULTURAL STATE CONVENTION.

The people of Virginia recently appointed delegates to an agricultural Convention, which body has just met at Richmond. We have not seen any detailed account of its proceedings, but from the brief notice given below, it will be seen that it was a highly dignified and imposing assemblage, and that the best results are likely to grow out of its doings, and in the spirit it will infuse into every vein and artery of the ancient commonwealth. Should not each state in the Union hold similar conventions? How glorious the conception, of a body of respectable farmers meeting together for the noble purpose of advancing the true happiness of the state—meeting as brothers and friends without one sinister thought, or jarring interest, to embitter reflection—to consult upon the best method of improving the husbandry of the country, and of laying a solid foundation for extending its physical capacities, and increasing the sum of human comforts.

“This Convention held a meeting at the capitol, on Wednesday night, and attracted much attention and interest. Gov. Barbour presided, and Edmund Ruffin, Esq. acted as Secretary. The President delivered an address, in which he grouped much useful knowledge and many facts both new and striking. His remarks were interspersed with amusing anecdotes, which, in addition to the intrinsic interest of the subject, afforded the convention and auditors much edification and pleasure. The convention numbered about 150.

James M. Garnett, Esq. read a memorial (ably drawn up) to be presented to the Legislature, and a committee was appointed, consisting of Thomas J. Randolph, of Albemarle, Claiborne W. Gooch, of Henrico, and George E. Harrison, of Prince George, to present the same to the legislature, and attend before the committee to which it may be referred.

Mr. Crutchfield yesterday presented the memorial, and it is now before the the proper committee.”—*Compiler*.

THE MULE.

[Copied by request from the American Farmer, vol. 7, No. 22.]

PRIZE ESSAY.

[The premium of a silver cup, of thirty dollars value, offered by ROBERT OLIVER, Esq., to the author of the best essay on the natural history of the Mule, and its value for the general purposes of agriculture, in comparison with horses, was awarded by a committee appointed by the Trustees of the Maryland Agricultural Society, to the author of the following Essay:]

A DISSERTATION ON THE MULE,

With the view of promoting an improvement in the breed; and of demonstrating the utility of employing him as a substitute for the horse, in the labours of husbandry, canals, &c.

By SAMUEL WYLLYS POMEROY.

"—Opinion is the queen of the world; it gives motion to the springs and direction to the wheels of power." John Quincy Adams.

"Knowledge is power."—Bacon.

Soon after the accession of Charles III. to the crown of Spain, his subjects were prohibited by a severe edict, from wearing *flapped hats and long cloaks*; which caused an *insurrection* that obliged him to flee from Madrid, after witnessing the massacre of nearly one hundred of his Walloon guards; and might have terminated in a revolution, but for a speedy revocation of the edict and banishment of his ministers. An eminent writer introduces the history of the occurrence, by observing that "it is easier to conquer half the world than to subdue a single prejudice or error, most nations having a superstitious attachment to those habits which they derive from their ancestors, that seemed to come along with them into the world, and with which they were nursed and brought up."

Perhaps it may be deemed by many quite as visionary or absurd, to attempt an introduction of the mule as a substitute for the horse, for the purposes of agriculture and hackney employment, as was the project of the Spanish monarch for compelling his subjects to wear the *French costume*, to the exclusion of one they had been so long accustomed to look upon "as a *distinction* which was the birth-right of every true Spaniard," and, as we may suppose, so congenial to the indolent habits for which that nation had long been proverbial.

It must be acknowledged that there are serious, though I trust in this age of improvement, not insurmountable impediments—for we have to combat not only hereditary prejudices, or, to speak more correctly, such as have proceeded from a deficiency of means and want of knowledge, to develop the valuable properties and to subdue propensities of a contrary character in this hybrid race, but we are met at the threshold by the same species of pride which the Spaniards manifested in regard to their costume, founded on the enthusiastic, I may almost say superstitious, attachment to the horse.

It is believed that a vast portion of our fellow-citizens, and I may with propriety add the people of Great Britain, from whom we have derived some inveterate prejudices as well as those illustrious examples that have had such a powerful influence in leading our country to the high des-

tinies that await her, do not consider that a *mule*, especially a well bred one, would be in himself and in their view, one of the best formed and most distinguished of animals, if they had never seen a horse—they must admit, however, that he holds the second rank instead of the first—and it is principally from this circumstance that so little attention has been paid to him in both countries. Comparison is the chief cause of his degradation—they look at and give their opinion not of himself, but comparatively with the horse. They seem not aware that he is a *mule*—that he has all the qualities of his nature, all the gifts attached to the connecting and final link of two distinct species, and think only of the figure and *qualities* of the horse which are wanting in him, and that he ought not to have; for he possesses those of more intrinsic value, which the supreme Author of nature has denied to both of his parents.

There are few subjects of animated nature that have engaged the attention of the most eminent naturalists, more than the genus *Equus*, to which the horse and ass, with their *hybrid* offspring, are assigned. *Linnaeus*, with a view to establish, by new arguments, his doctrine or theory of the *sexual system* of plants, which *Spallanzani* had attempted to overturn, illustrated their generation by pursuing the chain of nature from the animal to the vegetable kingdom; and has taken prominent examples from the two different productions of mules. He says, "from the mare and male ass proceeds the mule, properly so called, which in its nature, that is, in its medullary substance, nervous system, and what *Malpighi* calls the keel, (*carina*), bottom in sportsmen's language, is latent in, and derived from the mare. But in its cortical substance and outward form, in its mane and tail, resembles the ass. Between the female ass and the horse, the other kind of mule is engendered, whose nature or medullary substance, resembles that of the ass; but its outward form and cortical structure, or vascular system, that of the horse."*

The latter kind was called *Hinnus* by the ancients; hence the modern name *Hinny*. They were not held in much estimation by the Romans, according to Pliny, who describes them as difficult to manage, and so slow that little service could be derived from them. *Buffon* has noticed this animal, which he says, "is smaller than the mule, as it preserves the diminutive stature of the ass."—Hinnys were seldom propagated; but it is said that a number have lately been bred in Spain, probably in consequence of the destruction of mares in the peninsular war, and are represented of good size and more beautiful than the mule; that is, they resemble the horse much more. I understand a few have been bred upon the Spanish Main, no doubt from a similar cause that led to the system in Spain; and if my information is correct, some have been recently shipped to the West India islands, but are by no means esteemed so hardy, or valuable for service, as mules.

Notwithstanding mules have a disposition to

* See "A Dissertation on the Sexes of Plants," by Sir Charles Linnaeus—read before the Imperial Academy of Sciences at St. Petersburg, Sept. 6, 1760, and which obtained the premium of one hundred ducats.

propagate, there have been but two or three well authenticated instances recorded of their having *bred*; and those productions were considered monsters. *Buffon* was indefatigable in his researches on the subject; and although he admits that it is possible for both males and females to propagate, he is confident that their parents are of a species distinct from each other. He says, "the ass is not a horse degenerated," as some had supposed, "he is neither a stranger, an intruder, nor a bastard—he has, like other animals, his family, his species, and his rank; his blood is pure and untainted, and although his race is less noble, yet it is equally good, equally ancient as that of the horse." This profound naturalist confines a very minute and eloquent comparison between the horse and the ass—some of his expressions, I have taken the liberty to apply to the *mule* and the horse in a preceding paragraph.

It may promote the object in view to enter extensively upon the history of the ass, and we commence with the supposition, that when men became so far civilized as to have burdens to *carry*, or required to be *carried* themselves, this animal was the first domesticated for that purpose—and it is reasonable to infer that those of the least *spirit* and most *tractable*, were put in requisition in the first instance; when by breeding *in and in*, without any care in the selection of *sire* or *dam*, became in process of time degenerated to a very inferior grade. Be this as it may, it is an unquestionable fact, that different races of the ass now exist, possessing properties as distinct as are found in the species of *camel*. For instance, the *Bactrian* or single hunched camel, called the *dromedary*, by far the most numerous race, being lightly formed, exhibits great activity, and is able to traverse vast tracts with the speed of a *high mettled race horse*. The *Arabian camel*, with two protuberances on his back, is considerably larger, of much stronger form, travels at a pace seldom exceeding three miles an hour, and is capable of conveying such burdens, that the Arabs style him, emphatically, the *ship of the desert*; yet they are of the same species—a cross between them breed and constitute another variety, which multiply, and according to *Buffon*, have the most vigour, and are preferred to all others.

Ancient writers recognize three or four distinct varieties of the ass. According to the learned Dr. Harris, four different races are indicated in the original Hebrew scriptures, viz: *Para*, *Chamor*, *Aton*, and *Orud*.*

The wild ass (*Para*) was a native of *Arabia Deserta*, and those countries which formed the great *Babylonian empire*. They are now found in *Southern Tartary*, in the mountainous districts and saline plains of *Persia*—are migratory in

* See the "Natural History of the Bible, by Thaddeus Mason Harris, D. D., 1 vol. 8vo., Wells & Lilly, Boston." A work I would earnestly recommend to those readers of the sacred volume, who are desirous to be better acquainted with many allusions to subjects of natural history, founded on their nature, habits, and characteristic qualities, developing beautiful similes, which would otherwise lie concealed—and enabling them to judge more correctly of the propriety of such allusions.

large herds, visiting in winter the northern parts of *India*, and said to be so fleet that no horse can overtake them in the chase. This race are frequently alluded to by the inspired *poets* and *prophets*; and afford *similies* diametrically opposite to those drawn from the domestic race. The sublime description of the former in the book of Job, exhibits such a contrast, that I trust its insertion in this place will not be deemed improper.

"Who from the forest ass his collar broke,
And manumized his shoulder from the yoke?
Wild tenant of the waste, I sent him there
Among the shrubs, to breathe in freedom's air.
Swift as an arrow in his speed he flies;
Sees from afar the smoky city rise;
Scorns the throng'd street, where slavery drags her
load,
The loud voic'd driver and his urging goad:
Where e'er the mountain waves its lofty wood,
A boundless range, he seeks his verdant food."

Scott's Version.

We find, that at a very early period of sacred history, the common domestic ass (*Chamor*), was employed in all the menial labours of a patriarchal family, while a nobler and more estimable animal (*Aton*), was destined to carry the patriarchs, *the well born*; and those on whom marks of distinction were to be conferred. They constituted an important item in a schedule of the pastoral wealth of those times; of course, attracted particular attention and care. *David*, we are told, had an officer, apparently of high dignity, appointed expressly to superintend his stud of *high bred asses*, or *Atonoth*.

There was another race that has been mentioned by *Aristotle*, and by *Theophrastus*, whom *Pliny* quotes, which they denominated the *wild mules* that bred (*hemi-onos*), and were found in *Cappadocia* and *Africa*. There can be but little doubt but this is the *Hemionus*, or *wild mule* of the Mongolian Tartars, so particularly described by professor *Pallas*; and that it is not a *hybrid*, but actually of the species of ass resembling a mule. This race is identified by Dr. Harris, with the *Orud* of scripture.

The wild ass of Northern and Western Africa, whose flesh was so much admired by the Roman epicures, may, I believe, be ranked as another distinct race. Adanson, a French naturalist, who visited the river Senegal more than half a century ago, describes those brought from the interior by the Moors, as so essentially different from any he had seen in Europe, (probably those of Spain, Savoy, or parts of France adjoining) it was with difficulty he could recognize them to be the same species—neither do they answer the description of the wild ass of *Asia*, of which we have been speaking. But his account of them corresponds with the diminutive domestic race introduced from Africa, particularly those from *Senegal* and the *Cape de Verd islands*; and from which the small race now in Europe and in this country, may with great probability claim their origin.

The *Arabian* ass, like the horse of that country, is considered as the most estimable of his species—and there are strong reasons for concluding that he is descended from the Hebrew *Aton*, so highly valued by Abraham and by the patriarchs, judges and kings, at subsequent periods of sacred history; and that the same race has been preserved in the ancient land of *Uz*, in some degree of purity to the present time. Indeed, there can be

but little doubt on the subject, if we admit the fact, that the habits, manners and pursuits of the descendants of *Ishmael* have continued, with scarcely an *iota* of variation, from the day they took rank among the nations of the earth. The position is greatly strengthened by the information I received some years since, from an intelligent traveller of undoubted veracity, who had visited *Arabia* on the south-western side of the peninsula to *Mocha*; and on the eastern, as far as the mouth of the *Tigris*. He represented the superior race of asses of that country as most beautiful—of perfect symmetry, great spirit, activity and vigour. He had seen those that could not be purchased for less than four or five thousand dollars—an enormous price, considering the value of money among these people.* I understand from him, that the Arabs were as tenacious of preserving the pedigree of their horses, as the most careful breeder for the turf in England—and not less so of their asses. The descent of some of them they trace to those in the train of the queen of Sheba, when she visited Solomon—as they also do that of their horses to the numerous stud of that wise and gallant king.

Dr. Harris supposes the *wild ass* (*Para*), to be the *Onager* of the ancients; and that the *Aton* was of a different kind. My impressions coincide with the opinion of the learned divine—but may not writers of different periods have confounded the wild ass with the *Aton* in their representations of the *Onager*? for it is not improbable, but that the *Aton* was of the most improved breed known, produced from crosses of a choice selection of the domestic, the wild ass, and the *Hemionus*, or wild mule—which last professor *Pallas* recommends to complete the perfection of the species. This supposition is supported by *Buffon*, who infers as a certain fact, that by a cross of the remotest of different races of the ass, the most beautiful productions are obtained.

Mules were in use and highly esteemed at a remote period of antiquity; and are mentioned in scripture as of importance in the equipage of princes. Herodotus, who is styled the father of profane history, frequently speaks of them; and it is known that they were introduced in the chariot races at the Olympic games, in the seventieth Olympiad, about five hundred years before Christ. The Romans well knew their value. *Pliny* informs us, from *Varro*, that *Q. Axius*, a Roman senator, paid four hundred thousand sesterces, upwards of thirteen thousand dollars, for a male ass, for the propagation of mules. And he says further, that the profit of a female ass in breeding stock for the same purpose, was estimated in *Celteberia*, now the kingdom of Valencia in Spain, at a like sum. We may infer from a passage in *Tacitus*, and in *Plutarch's* life of *Marius*, that mules were generally employed to transport the baggage of the Roman armies; and that it is not improbable the superior officers rode those of a high grade, having their horses led, except when

* *Neibuhr* remarks, "there are two sorts of asses in Arabia: the smaller, or *lazy* ass, as little valued there as in Europe; and a large and high spirited breed, which are greatly valued, and sell at a very high price; I preferred them to the horse." See *Neibuhr's* travels in Arabia.

they engaged an enemy. It seems that the *dilettanti* of Rome held them in great estimation; as we are informed that the mules of *Nero* and *Poppaea*, were shod with gold and silver—not plates as iron shoes are now formed, but the whole hoof enclosed.

Columella, who in the reign of Emperor *Claudius* published the most valuable treatise on the husbandry and economy of the Romans that has been handed down to us, has given very particular directions for breeding asses and mules. He was a native of *Cadiz*, and owned estates in Spain, where it appears that the finest mules were then bred.

As it is not requisite to pursue our history of the mule any farther among the ancients, we shall drop their appellation of male and female ass, and adopt the modern one of JACK and JENNET.

Spain has continued to support the reputation for a superior race of mules to the present period; and it is probable that the Arabian breed of Jacks were introduced by the Moors, when they held possession of that fine country, which, by crosses, and the effects of climate and soil, have formed two valuable races: which we shall notice in the sequel. The Portuguese race have been generally considered as differing but little from the Spanish; those however, that have come within my view appear evidently inferior. It was not until near the close of the sixteenth century, that coaches were used in France; before which, it is said, the nobles rode to court, parliament, &c., on mules that were brought from the vicinity of the Alps and Pyrenees. They were usually black, of large size, well made, and mostly bred from fine Spanish mares. Savoy has long been noted for an excellent breed of mules. None very extraordinary are found in Italy, those used by the *Velterino*, are strong and of a respectable size, but of a sluggish and debased spirit. Very little can be said of those animals in Great Britain. The Catholic prelates brought over a number of superb mules, prior to the Reformation, but in the reign of *Elizabeth* so little was known of them, that a writer of that period says, "in Devonshire some were produced by a Jack brought from France, and were knocked on the head by the people, who viewed them as monsters." A superior race of mules were bred in *Flanders* from Jacks introduced by the Spanish monarchs while they held dominion in that country. Fifty of them were brought to England by the Duke of Cumberland, presented him by the Empress Queen, and from their beautiful appearance engaged the attention of a few individuals; but the spirit soon subsided. Notwithstanding those who bred and used them, were warm in praise of their utility.

Among a voluminous mass of treatises on agriculture and rural economy, published in that country for near a century past, scarce a line can be found devoted to the mule, except by Dr. Anderson, who, in his "Recreations in Agriculture," has made a few judicious remarks on the subject.

In Sir George Staunton's account of Lord Macartney's embassy to China, we are told that mules are valued in that economical empire, at a much higher price than horses. In our own country, prior to the war of the revolution, a few Jacks of an ordinary kind were imported—a small number of mules bred; and all exported to the

West Indies. I have reference to New England, as I am not aware that any attention was paid to the system in the Middle, or Southern states, though it is not improbable that some valuable mules may have been raised by the farmers and planters for their own use. When peace took place, the price of mules in the West Indies excited attention to the breeding of them, which was principally confined to Connecticut; and several cargoes of the small race of Jacks were imported from the Cape de Verd islands, and St. Michael's, one of the Azores. It should be observed that the exportation of Jacks from Spain, or any of her colonies, was strictly prohibited, and continued to be until after the Peninsular war. There might have been, however, a few smuggled from the Spanish part of Hispaniola into Cape Francois, and from thence introduced, but they were vastly inferior to the Spanish Jacks. From this miserable stock a system of breeding mules commenced, the best calculated to deteriorate any race of animals that has been, or could be devised, since their creation. The purchaser of a Jack when about to commence mule dealer, made little inquiry concerning him but of his capacity to propagate a mule. He placed him in a district where there was the greatest number of mares of qualities so inferior that their colts would not compensate their owners for the expense of taking them to a horse, and contracted to purchase their mules at four months old. Those are kept in herds, with precarious shelter in winter, having ample opportunities afforded them to mature and transfer that propensity for kicking, which seems at first merely playful, into an habitual means of defence, to be exercised when the biped or any other race of animals approach them. In this kicking seminary they remain two years, and are then driven to market. At subsequent periods, a few Jacks of higher grades were procured, from which a small number of good sized mules were bred and a few of them broke. The breed of Jacks have somewhat improved, and mule dealers are now located in most of the New England states, and some parts of New York. But the system as above detailed, with few exceptions, has continued; and it is from such a race of Jacks and such a system of breeding and management, that the mules have been produced, with which the farmers and planters of Maryland, Virginia, and the Southern states, have been supplied from New England; and such have furnished a criterion for a great portion of our countrymen to form an estimate of the value and properties of this degraded animal. It affords great pleasure to be enabled, for a short time at least, to pursue our investigations in an higher sphere.

Several of my friends who had viewed the Jacks and mules at Mount Vernon, in the life time of Gen. Washington, gave such glowing descriptions of them, and understanding that part of that stock was inherited by George W. P. Custis, Esq. I was induced to address a few queries to him on this subject; this gentleman with his characteristic urbanity, very promptly furnished replies, with liberty to make such use of them as I pleased, and I cannot do better than to transcribe them from a letter received about three years since.—Mr. Custis observes:

"The ROYAL GIFT and KNIGHT OF MALTA,

were sent to General Washington about the year 1787;—the *Gift*, with a JENNET, a present from the King of Spain; and said to have been selected from the royal stud. The *Knight* I believe was from the Marquis de la Fayette, and shipped from Marseilles. The *Gift* was a huge and ill shaped Jack, near sixteen hands high, very large head, clumsy limbs, and to all appearance little calculated for active service; he was of a grey colour, probably not young when imported, and died at Mount Vernon but little valued for his mules, which were unwieldy and dull. The *Knight* was of a moderate size, clean limbed, great activity, the fire and ferocity of a tiger, a dark brown, nearly black colour, white belly and muzzle; could only be managed by one groom, and that always at considerable personal risk. He lived to a great age, and was so infirm towards the last as to require lifting. He died on my estate in New Kent, in the state of Virginia, about 1802 or 3. His mules were all active, spirited, and serviceable; and from stout mares attained considerable size.

"General Washington bred a favourite Jack called COMPOUND, from the cross of Spanish and Maltese. The *Knight* upon the imported Spanish *Jennet*. The Jack was a very superior animal; very long bodied, well set, with all the qualities of the *Knight*, and the weight of the Spanish. He was sire of some of the finest mules at Mount Vernon, and died from accident. The General bred mules from his best coach mares, and found the value of the mule to bear a just proportion to the value of the dam. Four mules sold at the sale of his effects, for upwards of \$800; and two more pairs at upwards of \$400 each pair; one pair of these mules were nearly sixteen hands high. The only Jacks I know of at present, of the genuine Mount Vernon stock, are, one sold by me to Judge Johnson, of South Carolina, for five hundred dollars, at two years old; one given by me to William Fitzhugh, Esq., of Ravensworth, and one which I believe is possessed by my uncle, George Calvert, Esq., Riversdale.

"The Jack purchased by Judge Johnson, I have understood, has a very high reputation in the south.

"Upon losing my groom, (Peter) who was the first and last groom to the Mount Vernon Jacks, I parted with my stock.

"There are many Jacks that have come into the country of late years, but of their value and properties I am unable to speak: though I rather presume that they are generally small, and only fitted to get mules for the cotton cultivation in the light lands of the south. Some very fine mules are raised about Hagerstown, Maryland, from Jacks of the old breed; they are bred from stout wagon mares.

"As to my opinion of the value of mules, I shall always appear extravagant. I have scarce a horse on my estates for agricultural purposes, nor would I accept of one as a gift, (except for road wagons) of which I have no need, as my property lies upon navigable water. Nothing ever was so good as mules for the uses of this, our southern country; they live longer, eat less, and above all, are better suited to our slaves, than any other animal could possibly be; their strength, patient endurance of privation and hardships, slender pasturage, exposure—and in short, all

those ills to which animals are subject where slaves are their masters, give to mules a decided preference in all the agricultural states of the south.

"I do not know of any being trained to the purposes of pleasure carriages. They are often ridden, and go pleasantly, with great surety of foot. I have no doubt, but that in time they will generally be used for carriages, and would particularly suit mail coaches; they are very swift, and have great durability in travelling."

The *Knight of Malta*, mentioned by Mr. Custis, was unquestionably the first Maltese Jack ever brought to the United States. The second came in the frigate *Constitution*, on her return, I think, from her first cruise in the Mediterranean; and, I have understood, was sold in the District of Columbia, or one of the adjoining states. Since that time a number have been introduced by officers of the navy from *Malta*, and the large *Spanish* breed from *Minorca* and *Majorca*. From the Mount Vernon and those stocks, some fine mules have been bred in the middle states, and probably farther south. A few valuable *Maltese* Jacks have been imported in merchant ships.

The impressions received, when on a visit to the West Indies in my youth, by observing, on the sugar plantations, the severe labour performed by mules in cane mills, induced me, when I commenced farming, to purchase the first well broke mule I could light on; and notwithstanding he was so small as to require a vehicle and harness constructed purposely for him, his services were found so valuable, and the economy of using those animals so evident, that I was stimulated to great exertions for procuring several others of larger size; in this I succeeded, after great difficulty, to such an extent, as to have had more labor performed by them on farm and road, for thirty years past, than any person I presume, in New England; and every day's experience has served to fortify my conviction of the superior utility of the mule over the horse, for all the purposes for which I have proposed him as a candidate. And it should be considered, that those I have used were of an ordinary breed, vastly inferior to such as may be easily produced in our country, by attention to the introduction of a suitable race of Jacks, and a proper system of breeding and management. The question occurs how is this to be effected? I will premise, that there exists a strong analogy between three varieties of the horse, and those of the domestic ass, considered the most valuable. We have the *Arabian*, the *hunter*, and the stout *cart-horse*. There is the heavy *Spanish* Jack, with long slouching ears, which Mr. Custis has described, that answers to the cart-horse; another Spanish breed called the *Andalusian*, with ears shorter and erect, of tolerable size, plenty of bone, active, more spirited, and answering to the hunter. Then comes the *Arabian* Jack, with ears always erect, of a delicate form, fine limbs, and full of fire and spirit. Judicious crosses from these varieties, will be requisite to produce such kind of mules as may be wanted for general purposes. From the small Jack of *African* origin, with a list down his back and shoulders, are bred a small race of mules, by far the most hardy of any. With attention to selection in breeding the Jacks, with, perhaps, a dash of some cross of the foregoing description, a stock

of mules may be produced, preferable to all others for the light lands and cotton culture of the middle and southern states.

To procure any number of *Arabian Jacks* from their native country, is hardly practicable at the present time. *Egypt* has been celebrated by Son-nini and other travellers, for superb Jacks of the Arabian breed, which probably has been often improved by those introduced by the Pilgrims from Mecca. I apprehend no great difficulty in obtaining them from that country. There is, however, no question but the *Maltese Jacks* are of the *Arabian* race, more or less degenerated. The most of those brought to this country that I have seen, were selected on account of their size, and had been used to the draught. I should recommend the selection of those that are esteemed most suitable for the saddle as likely to possess greater purity of blood. A Jack of this kind was, a number of years since, imported from Gibraltar, that had been selected by a British officer at Malta; and very much resembled the *Knight of Malta* described by Mr. Custis. I found upon a careful examination, that he differed but little from the description I had heard and read of the true *Arabian* race; indeed I could discover some prominent points and marks, that agreed with those found, by Professor Pallas, to belong to the *Hemionus* or wild mule of Mongolia. From this Jack I have bred a stock, out of a large *Spanish Jennet* of the *Andalusian* breed, that correspond very minutely with Mr. Custis's description of *Compound* bred by General Washington, and also a mule that now, not three years old, stands fifteen hands, and has other points of great promise.

Such have been the ravages of war and anarchy in Spain for a long time past, that the fine race of *Jacks* that country once possessed have become almost extinct. In Majorca and probably some part of the coast of Spain opposite, the large breed may be obtained: and there formerly was a superior race in *Andalusia*, which it is hoped have been preserved. Crosses on one of these breeds by the *Arabian* or *Maltese*, I consider indispensable to furnish a race of Jacks for the production of the most desirable mules, uniting the weight and bone of one, with the spirit and vigor of the other; although their height will in a great measure depend on the mares, yet if sired by full blooded *Maltese Jacks*, their limbs are too slender and their pasterns too long for heavy draught; but for the saddle, especially from blood mares, they are admirable, and out of stout mares suitable for light carriages.

My attention has been but lately directed to breeding mules; and those intended only for my own use. The system adopted is to halter them at four months, and have the mules emasculated before six months old; which has great influence on their future conduct, and is attended with much less hazard and trouble, than if delayed until they are one or two years old, as in the general practice. If they are treated gently and fed occasionally out of the hand, with corn, potatoes, &c. they soon become attached; and when they find that "every man's hand is not against them," will have no propensity to direct their heels against him, and soon forget they have the power. In winter they should be tied up in separate stalls,

and often rubbed down. By such treatment there is not more danger of having a vicious mule than a vicious horse—and I am decidedly of opinion, that a high spirited mule so managed and well broke, will not jeopardize the lives or limbs of men, women, or children by any means so much as a high spirited horse, however well he may have been trained.

The longevity of the mule has become so proverbial, that a purchaser seldom inquires his age. *Pliny* gives an account of one, taken from Grecian history, that was eighty years old; and though past labor, followed others that were carrying materials to build the temple of *Minerva* at Athens, and seemed to wish to assist them; which so pleased the people, that they ordered he should have free egress to the grain market. Dr. Rees mentions two that were seventy years old in England. I saw myself in the West Indies, a mule perform his task in a cane mill, that his owner assured me was forty years old. I now own a mare mule, twenty-five years old, that I have had in constant work twenty-one years, and can discover no diminution in her powers; she has within a year past often taken upwards of a ton weight in a wagon to Boston, a distance of more than five miles. A gentleman in my neighborhood has owned a very large mule about fourteen years, that cannot be less than twenty-eight years old. He informed me a few days since, that he could not perceive the least failure in him, and would not exchange him for any farm-horse in the country. And I am just informed, from a source entitled to perfect confidence, that a highly respectable gentleman and eminent agriculturist, near *Centreville*, on the Eastern shore of *Maryland*, owns a mule that is thirty-five years old, as capable of labor as at any former period.

The great Roman naturalist, in one of the most beautiful passages of his elaborate history of nature, observes that "the earth is constantly teased more to furnish the luxuries of man than his necessities."* We can have no doubt but that the remark applied with great justice to the habits of the Romans in the time of *Pliny*; and I am much mistaken if ample proofs cannot be adduced, that it will lose none of its force or truth, at this present period, in all northern climates, or any section of the United States, where the horse is employed for agriculture as well as for pleasure. Far be it from me, however, to disparage this no-

* "It is the earth that, like a kind mother receives us at our birth, and sustains us when born. It is this alone, of all the elements around us, that is never found an enemy to man. The body of waters deluge him with rains, oppress him with hail, and drown him with inundations; the air rushes on in storms, prepares the tempest, or lights up the volcano; but the earth, gentle and indulgent, ever subservient to the wants of man, spreads his walks with flowers, and his table with plenty; returns with interest every good committed to her care, and though she produces the poison, she still supplies the antidote; though constantly teased more to furnish the luxuries of man, than his necessities, yet, even to the last, she continues her kind indulgence, and when life is over, she piously hides his remains in her bosom."

Pliny's Natural History, Book II. Ch. 63.

ble animal, on the contrary, I feel a strong attachment for him; and at the same time a full conviction, that the substitution of the mule for the purposes before stated, as extensively as may be consistent with the requisite production of each species, will have the effect of restoring the horse to the station from which he has been degraded, and place him, as in former ages, upon a more dignified footing—an object of acknowledged luxury; and thereby introduce a more correct system of breeding and management, in which our countrymen are so generally deficient, consequently more perfect animals and such an advance in the price of them, that will afford the farmer what he is now a stranger to—such remuneration as will make his brood mares a profitable species of stock. And it is obvious, that the system will be followed by an improvement in the breed of mules, in the same ratio as the miserable race of scrub mares, which are now consuming the profits of agriculture, shall become extinct.

It does not appear that the horse was employed by the ancients for any purpose of husbandry. The ox and ass drew the plough and the wain, and performed all kinds of drudgery until after the feudal system was established in Europe; when the numerous retainers of the feudal lords, who held their lands by the tenure of performing knight's service, found themselves under the necessity of making the horses they were obliged to keep, contribute towards their support in the cultivation. From this time, I believe, we may date, and to this cause may be attributed the introduction of the horse for the purposes of agriculture. Since that period, the history of Europe is little else than the annals of war and its preparations; and no material for that scourge, except the deluded human victims, seems more necessary than the horse; accordingly we find, that throughout the whole country, from the Rhine or the Seine, to beyond the Danube and Vistula, which has been the principal arena, the system of agriculture has embraced, extensively, the breeding of horses of different grades and forms adapted to the several uses in war. Indeed whole provinces were appropriated almost exclusively to the rearing those animals for disposal to the different combatants; and it must be obvious, that their general use in husbandry, at the same time, would follow as a necessary consequence. It cannot be expected therefore, but that the Dutch and Germans who have emigrated to our country, should bring with them such strong predilections for the horse, which have continued with most of their descendants, especially in those sections where communities of that respectable and industrious portion of our population have been located. In Great Britain, to the causes which have produced the effects described on the continent, may be added the insular position of the United Kingdoms, vulnerable from numberless and distant points, the horse has been considered, in connection with the unconquerable spirit of the nation, as one of the most efficient means of repelling invasion. A circumstance that would of itself be sufficient to account for the over-weening attachment to this animal. But identified, as his services have been for a long period, with the convenience, sports, and recreations of all ranks and classes, and the science of breeding and training, forming a cha-

racteristic feature, it could not excite surprise, if the approach of that terrible spectre, *famine*, should produce little or no effect in the reduction of the number. And, although some of the most distinguished characters in the nation, eminent for their practical knowledge in rural economy, have been for half a century advocating the substitution of the ox for the purposes of agriculture, and demonstrating the feasibility, economy, and vast saving of food, yet it is said the number of laboring oxen have lately diminished and horses increased: FIVE MILLIONS of the latter are now supposed to subsist in the United Kingdom, and two thirds employed in husbandry—consuming, at a moderate estimate, the product of twenty millions of highly cultivated acres! And what is the consequence? *consumption* follows so closely upon *supply*, that at every season of *harvest*, let the preceding one be never so abundant, fast sailing vessels are found in the various ports with their anchors *atrip*, to convey intelligence of the result to all parts of the world where a surplus of broad corn is grown—exciting such an interest in our own country, that the farmer on the shores of *Eric* and *Ontario*, and on the banks of the *Ohio*, may be seen reading *bulletins of British weather*—the rain and sunshine of every day in *August* and the two following months—often within thirty days after the time of their publication in London or Liverpool. Can it be supposed that in a country, where an attachment to the horse borders so nearly upon *insatiation*, that the question of the utility of the mule as a substitute, would be seriously agitated, or engage scarce a momentary investigation?

In no country is the mule better adapted to all the purposes of husbandry, for which the horse is used, than in every section of our own. And it would be highly desirable to be able to exhibit a calculation of the actual saving, in *dollars and cents* by his employment; but, unfortunately, no correct data can be had. And as I consider such calculations, unless founded upon experimental facts, and those multiplied, to be as “tinkling cymbals,” I shall merely submit a *desultory* between the mule and the horse, derived from such facts as my own experience, and information from authentic sources, will justify the assumption of.

From what has been stated respecting the longevity of the mule, I think it may be fairly assumed that he does not deteriorate more rapidly after twenty years of age than the horse after ten, allowing the same extent of work and similar treatment of each. The contrast in the mule's freedom from malady or disease, compared with the horse, is no less striking. Arthur Young during his tour in Ireland, was informed that a gentleman had lost several fine mules by feeding them on wheat straw cut. And I have been informed that a mule dealer in the western part of New York, attributed the loss of a number of young mules, in a severe winter, when his hay was exhausted, to feeding them exclusively on cut straw and Indian corn meal. In no other instance have I ever heard or known of a mule being attacked with any disorder or complaint except two or three cases of inflammation of the intestines, caused by gross neglect in permitting them to remain exposed to cold and wet, when in a high state of perspiration after severe labor, and drink-

ing to excess of cold water. From his light frame and more cautious movements, the mule is less subject to casualties than the horse. Indeed it is not improbable, but a farmer may work the same team of mules above twenty years, and never be presented with a *farrier's* bill, or find it necessary to exercise the art himself.

Sir John Sinclair, in his “Reports on the Agriculture of Scotland,” remarks that “if the whole period of a horse's labor be fifteen years, the first six may be equal in value to that of the remaining nine; therefore a horse of ten years old, after working six years, may be worth half his original value. He estimates the annual decline of a horse to be equal to 50 per cent. on his price every six years, and supposes one out of twenty-five that are regularly employed in agriculture, to die every year: constituting a charge of four per cent. per annum for insurance against diseases and accidents. He considers five acres of land, of medium quality, necessary for the maintenance of each horse, and the annual expense, including harness, shoeing, farriery, insurance and decline in value, allowing him to cost \$200, to exceed that sum about five per cent, which is the only difference between the estimate of this illustrious and accurate agriculturist, and that of a respectable committee of the *Farmers' Society of Barnwell district*, South Carolina, who, in a report published in the *Charleston Courier*, of 23d of February last, state, that “the annual expense of keeping a horse is equal to his value!” The same committee also state, that “at four years old a horse will seldom sell for more than the expense of rearing him.” That “the superiority of the mule over the horse, had long been appreciated by some of their most judicious planters; that two mules could be raised at less expense than one horse; that a mule is fit for service at an earlier age, if of sufficient size—will perform as much labour, and if attended to when first put to work, his gait and habits may be formed to suit the taste of the owner.” This report may be considered a most valuable document, emanating, as it does, from enlightened practical farmers and planters, in a section of our country where we may suppose a horse can be maintained cheaper than in *Maryland* or any state farther north.

I am convinced that the small breed of mules will consume less in proportion to the labour they are capable of performing, than the large race, but I shall confine the comparison to the latter—those that stand from fourteen and a half to be rising of fifteen hands, and equal to any labour that a horse is usually put to. From repeated experiments, in the course of two winters, I found that three mules of this description, that were constantly at work, consumed about the same quantity of hay and only one fourth the provender that was given to two middling sized coach horses moderately worked. And from many years attentive observation, I am led to believe that a large sized mule will not require more than from three-fifths to two-thirds the food, to keep him in good order, that will be necessary for a horse performing the same extent of labour. Although a mule will work and endure on such mean and hard fare, that a horse would soon give out upon, he has an equal relish for that which is good, and it is strict economy to indulge him, for no animal

will pay better for *extra keep* by *extra work*. But if by hard fare, or hard work, he is reduced to a skeleton, two or three weeks rest and good keeping will put him in flesh and high condition for labour. I have witnessed several such examples with subjects twenty years old; so much cannot be said of a horse at half that age. The expense of shoeing a mule, the year round, does not amount to more than one-third that of a horse, his hoofs being harder, more horny, and so slow in their growth, the shoes require no removal, and hold on till worn out; and the wear from the lightness of the animal, is much less.

In answer to the charge generally prevalent against the mule, that he is “vicious, stubborn and slow,” I can assert, that out of about twenty that have been employed on my estate at different periods during the course of thirty years, and those picked up chiefly on account of their size and spirit, wherever they could be found, one only had any vicious propensities, and those might have been subdued by proper management when young. I have always found them truer pullers and quicker travellers, with a load, than horses. Their vision and hearing is much more accurate. I have used them in my family carriage, in a gig, and under the saddle, and have never known one to start or run from any object or noise; a fault in the horse that continually causes the maiming and death of numbers of human beings. The mule is more steady in his draught, and less likely to waste his strength than the horse; hence more suitable to work with oxen; and as he walks faster, will habituate them to a quicker gait. But for none of the purposes of agriculture does his superiority appear more conspicuous than ploughing among crops; his feet being smaller and follow each other so much more in a line that he seldom treads down the ridges or crops. The facility of instructing him to obey implicitly the voice of his driver or the ploughman, is astonishing. The best ploughed tillage land I ever saw, I have had performed by two mules tandem, without lines or driver.

There is one plausible objection often urged against the mule, that “on deep soils and deep roads, his feet being so much smaller than those of the horse, sink farther in;” but it should be considered that he can extricate them with as much greater facility.

Few can be ignorant of the capacity of the mule to endure labour in a temperature of heat that would be destructive to the horse, who have any knowledge of the preference for him merely on that account, in the West Indies, and in the Southern states.

It is full time to bring our comparison to a close; which I shall do by assuming the position, that the farmer who substitutes mules for horses, will have this portion of his animal labour performed with the expense of one spire of grass instead of two; which may be equal, so far, to making “two spires grow where one grew before.” For although a large sized mule will consume somewhat more than half the food necessary for a horse, as has been observed, yet if we take into the account the saving in expense of shoeing, farriery, and insurance against diseases and accidents, we may safely affirm that a clear saving of one half can be fully substantiated. But in addition to this, the

mule farmer may calculate, with tolerable certainty, upon the continuation of his *capital* for *thirty years*; whereas the *horse* farmer, at the expiration of *fifteen years*, must look to his *crops*, to his *ares*, or a *Bank*, for the renewal of his—or, perhaps, what is worse, he must commence *horse-jockey* at an early period.

The intense interest with which the public mind is at present occupied on the subject of canals now in operation and progress, encourages me to offer the *mule* as an important *auxiliary* in the economy of their management; as, I trust, it will not be denied, that on the *cheapness* of transportation, on them depends their *utility* as well as *profit* to the stockholders. The *mule* seems so peculiarly adapted for the labour on canals, that compared with the horse, he may be considered almost equal to a *locomotive power engine*. Among the advantages we have enumerated respecting his use in husbandry, the most of which are applicable to canal labour, that of the much greater security from *diseases* and *casualties*, which must necessarily require a great number of supernumerary *horses*, to prevent interruption in the line of passage, is not the least important; nor is the very trifling expense at which the *mule* can be supported during the winter months, as he will bear being taken off his *feed* till the boats are about to be launched in the spring, and in a few days can be made fit for efficient duty—while a *horse* will require at least *half feed* if he does *nothing*, or must be *fed high* for some time before he can resume the labour that will be demanded of him. The same advantage may be derived by his employment on *railways*.

In a communication, published in the *Utica Observer*, the 16th of May, inst., by Henry Seymour, Esq., one of the *canal commissioners* of New York, it is stated that a *packet-boat* on the Erie canal, requires a team of *three horses* to tow sixteen miles—going eighty miles in the twenty-four hours, including stoppages and detention at locks; the *relays* demanding fifteen horses for each *nautical day*. If it takes five days for a boat to be towed from Lake Erie to the Hudson, *seventy-five horses* will be required. I am not certain but it may be done in a little less time, but as there must always be supernumeraries kept, we shall be within bounds to estimate that number. In the same communication, the expense of each horse is estimated at *fifty cents* per day, I presume for subsistence *only*, without reference to *interest* or deterioration of *capital*, for the object of the estimate seems merely to show a *comparison* between the *packet-boats* and *freight-boats*, on a question of *profit* and *loss*; as it is remarked, that “many *contingent* expenses might be added to both.” Taking this *data*, it will cost *thirty-five dollars* per day for the *horse* subsistence of a single *packet-boat*. The *freight-boats* require but *two*, and allowing for the time occupied in taking in and discharging their cargoes, with the other necessary detentions, averaging *forty miles* per day—which being double the time of the *packet boats*, although they may not require the same number of *relays*, the expense cannot materially differ. From these premises we may conclude, that for every boat navigating the *grand Erie canal*, there must be expended *three hundred and fifty dollars* for the subsistence of the *horses*,

each time they tow her from the Lake to the Hudson and back. Now, if this can be done effectually by *mules* for one half this sum, and with an extension of *capital free of interest, fifteen years longer* than that vested in horses, the aggregate of this immense saving will appear by ascertaining the number of boats at the present time on the canal. But this is out of my power; and I should, perhaps, lead the reader *nearer the verge of incredulity*, were I to offer my own prediction what that number *will* be thirty years hence, the ordinary period of a *mule's* labour, and which will then be some years less than a single century since the *PRIME MOVER* and *GUARDIAN* of this *stupendous undertaking*, the present Governor of New-York, first saw the light of heaven.

I cannot resist an impulse to exhibit the *mule* in one other point of view. For the movement of *machinery*, the employment of this animal, when judiciously selected, has met with a most decided preference, in comparison with the horse, independent of the *economy* in using him. And if we consider the rapid, and probably progressive increase of *labor-saving* machines, in every department where they can be made subservient to the requirements of society, it is evident that there will be a corresponding demand for *animal power*, as well as for that *more potent*, derived from the element; and although the *latter* may *vastly* predominate, yet should the horse be employed, and his increase for other purposes continue, as it now does, in the *ratio* of population, the number, at no very distant period, may become as alarming in our own, as it is at present in our *mother country*. And notwithstanding we may feel secure, from the extent of our territory and extreme diversity of *soil* and *climate*, but, above all, from being in possession of *Indian corn*—the *GOLDEN FLEECE* found by our “*pilgrim fathers*,” when they first landed on these shores; yet such peculiar advantages may not insure us against the visitations of one of the most distressing calamities that a feeling community can possibly be subjected to.

Brighton, Mass. May 27, 1825.

THE GREVILLE ROSE.

This superbly beautiful rose, notwithstanding fifty plants of it were sold in Baltimore, for five dollars each, in the year 1828, is not so generally known as it ought and deserves to be. I have had one to bloom for several years, and last year it had fifty five branches of flowers, and made about 300 feet of wood, and in my opinion, fully realizing the high character given of it in the fourth number of Loudon's Magazine, page 467, and in the report of the Horticultural Society of London, for the month of June, 1826, which I have extracted for more general information.

Rosa Grevillii, or *Greville Rose*.—This species has attracted much notice in different parts of Europe and in this country, being quite a novelty in its general characteristics, and in commenting upon which I cannot perhaps give a better idea to the reader than by extracting the statements made in other publications. In the fourth number of Loudon's Magazine, page 467, is the following description given, in a letter from a correspondent to the editor:—

“You will no doubt recollect the shoot I showed you of my *Greville Rose*, which grew 18

feet in a few weeks—it is now in bloom, and is the most singular curiosity of all the rose tribe that has come under my observation; it grows on an east by north aspect, on the gable end of my house, covering above 100 feet square, with more than 100 trusses of bloom. Some of them have more than 50 buds in a cluster, and the whole will average about 30 in a truss, so that the amount of flower buds is little short of 3,000. But the most astonishing curiosity is the variety of colors produced on the buds at first opening; white, light blush, deeper blush, light red, darker red, and purple, all on the same clusters.”

In the report of the Horticultural Society of London for the month of June, 1826, the following remarks are made:

“*Rosa Grevillii*, in a single fasciculus of flowers, are roses of every shade of purple, and from white to the darkest tint; it is one of the handsomest of climbing roses.”

The leaves are beautifully serrated on the edges, and those on the young shoots have a pink border running entirely round the leaf, and which, contrasted with the green, gives them a delicate and beautiful appearance; the petiole or leaf-stalk is broad at the base, and deeply indented on the sides, so as to form narrow hair-like segments: the upper part where it joins the leaf is narrow and of the usual size. I have succeeded during the past season in rearing about 150 young, vigorous plants, two-thirds of which have already disseminated throughout the Union, and near 500 more are in a progressive state, and will be fit for transplanting the ensuing season.”

The undersigned having become fully satisfied of the utility and beauty of this rose, and encouraged by the numerous orders coming in for it, has been induced to propagate it largely, and to lower the price to \$1 or \$1 50 in large pots, by which means they can be removed at any season of the year.

ROBERT SINCLAIR.

Chairmont Nursery, Jan. 9.

THE WEEKLY METROPOLITAN.

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BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured....	pound.	11	—
Shoulders,.... do.....	"	10	—
Middlings,.... do.....	"	8½	9
Assorted, country,....	"	7	8
BUTTER, printed, in lbs. & half lbs.	"	18½	25
Roll,.....	"	20	—
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old....	each.	3 00	6 00
Cows, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 75	1 81
CHOP RYE,.....	"	1 81	1 87
EGGS,.....	dozen.	—	—
FISH, Shad, No. 1, Susquehanna, barrel.	7 75	—	—
No. 2,.....	6 75	—	—
Herrings, salted, No. 1,.....	4 00	4 12½	—
Mackerel, No. 3,.....	5 75	—	—
Cod, salted,.....	cwt.	3 00	35 0
LARD,.....	pound.	10	10

BANK NTOE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,.....par	VIRGINIA.
Branch at Baltimore,....do	Farmers Bank of Virginia,.....do
Other Branches,.....do	Bank of Virginia,.....do
MARYLAND.	Branch at Fredericksburg do
Banks in Baltimore,....par	Petersburg,.....do
Hagerstown,....½a	Norfolk,.....do
Frederick,.....do	Winchester,.....do
Westminster,.....do	Lynchburg,.....do
Farmers' Bank of Mary'd, do	Danville,.....do
Do. payable at Easton,....do	Bank of the Valley,....do
Salisbury,.... 5 per ct. dis.	Branch at Romney,.... ¾
Cumberland,.....½a	Do. Charlestown, .do
Millington,.....do	Do. Leesburg,.....do
DISTRICT.	Wheeling Banks,.... 1½a2
Washington, } Banks, ½.	Ohio Banks, generally 2½a3
Georgetown, } Banks, ½.	New Jersey Banks gen. 1½a2
Alexandria, } Banks, ½.	New York City,.....½a
PENNSYLVANIA.	New York State,.... 2½a3
Philadelphia,.....½a	Massachusetts,.... 2a2½
Chambersburg,.....½a	Connecticut,..... 2a2½
Gettysburg,.....do	New Hampshire,.... 2a2½
Pittsburg,.....1½a2	Maine,..... 2a2½
York,.....½a	Rhode Island,.... 2a2½
Other Pennsylvania Bks. 1½a2	North Carolina,.... 2½a3
Delaware [under \$5].... 3a4	South Carolina,.... 2½a3
Do. [over \$5].....½a	Georgia,..... 3a3½
Michigan Banks,.....5a	New Orleans,..... 4
Canadian do.....5a	

WHITE TURKEYS.

A few pair of White Turkeys would be purchased at the Agricultural Repository in Light near Pratt street, by
de 29
ROBERT SINCLAIR Jr.
3t.

SAXONY RAMS.

The editor of the Farmer and Gardener has for sale 2 full blooded Saxony RAMS, and 2 ¾ blooded do. These sheep are of a family remarkable for their fine fleece, their wool always commanding the best prices in the market.

ALSO

The bull *Brilliant*, a large sized animal of the Improved Durham Short-horn breed. He is red and white; was got in England, and calved in Frederick county, Md., on the 12th May 1829. His dam was Matchless, got by Favorite, (purchased at the sale of the late R. Colling, a celebrated breeder) son of Favorite, dam by H. Allison's Gray bull, sire Orlando, that died on the passage from Liverpool, out of Rosina, from Yorkshire, that gained the highest prize premium of ten sovereigns at a Cattle show in Manchester, England.
no 3

FOR SALE ON MODERATE TERMS.

THE editor of the Farmer and Gardener has for sale two most beautiful Devonshire Bulls, rising three years of age each, of pure and celebrated blood. Also, one Bull 4 years old, a cross between a full bred Durham bull and a pure Devon cow. This noble animal combines in a remarkable degree the good points of both breeds. To gentlemen of the south who may desire to improve their stocks of cattle, the present is an opportunity rarely to be met with. All letters to the editor upon the subject must be post paid.
de 29

THE SALMAGUNDI,

AND NEWS OF THE DAY.

Embellished with a multitude of Comic Engravings. A new periodical, of a novel character, bearing the above appellation, will be commenced on the beginning of January, 1836. While it will furnish its patrons with the leading features of the news of the day, its principal object will be to serve up a humorous compilation of the numerous lively and pungent sallies which are daily floating along the tide of Literature, and which, for the want of a proper channel for their preservation, are positively lost to the Reading world. Original wits and humorists of our time will here have a medium devoted to the faithful record of the scintillations of their genius. It is not necessary to detail the many attractions which this journal will possess, as the publisher will furnish a specimen number to every person who desires it—(those out of the city, will forward their orders, postage paid)—and he pledges himself that no exertions on his part shall be wanting to make each succeeding number superior in every respect to the preceding ones.

THE SALMAGUNDI will be printed on large imperial paper, equal in size and quality to that which is at present used for the Gentleman's Vade Mecum. It is calculated that MORE THAN 500 ENGRAVINGS will be furnished to the patrons of this Journal in one year—these, in addition to an extensive and choice selection of Satire, Criticisms, Humour, and Wit, to be circulated through its columns, will form a Literary Banquet of a superior and attractive order; and the publisher relies with perfect confidence on the liberality of the American public, and the spirit and tact with which this expensive undertaking will be prosecuted, to bear him successfully and profitably along with it.

The terms of THE SALMAGUNDI will be TWO DOLLARS per annum, payable invariably in advance. No paper will be furnished unless this stipulation is strictly adhered to. Clubs of three will be supplied with the paper for one year, by forwarding a five dollar note, postage paid. Clubs of seven will be supplied for the same term, by forwarding a ten dollar note. The papers that are sent out of the city will be carefully packed in strong envelopes, to prevent their rubbing in the mail.

THE SALMAGUNDI will be published on alternate weeks—otherwise it would be impossible to procure the numerous Embellishments which each number will contain—and the general interest it will afford must be enhanced by this arrangement.

All orders must come postage paid.
Address, CHARLES ALEXANDER, Athenian Buildings, Franklin Place, Philadelphia.
de 29

THE SILK MANUAL.

JUST published and for sale by Sinclair & Moore and Robt. Sinclair, Jr., at the Maryland Agricultural Repository, Light near Pratt street, Baltimore, a complete Manual of the Silk Culture, in which plain instructions are laid down for the culture of the Mulberry, the feeding of the Silk worms, management of the cocoons, reeling, spinning and dyeing of the Silk. In fine, it is a perfect Manual, and comprises every department of the business. The rules are arranged in so plain and methodical a manner that every one can understand them, and by a very few hours attention become master of the business. It is clearly demonstrated in this Manual, that largely upwards of \$500 may be netted from an acre in the Culture; and it is a singular fact connected with the Mulberry as adapted to the making of Silk, that poor dry, sandy, or gravelly land suits it best, the fabric made from worms fed on leaves raised on such soil, being greatly superior in elasticity and richness of gloss to those grown on rich grounds.

Price—per copy, 50 cents.
Liberal discounts made to the trade.

Printed by Sands & Neilson, N. E. corner of Charles and Market streets.

TO AGRICULTURISTS—The analysis of Soils, manure, mineral waters, and other productions, interesting those engaged in Agricultural pursuits, is performed with promptness and accuracy, by

3 TYSON & FISHER, Chemists,
Druggists, No. 192 Market street, Baltimore.

DEVON STOCK.

THE editor of the Farmer and Gardener can at all times supply orders for Devon Cattle. This breed is so distinguished for their easy keep and docility; the richness of the milk of the cows, and for the activity and sprightliness of the oxen, that they would be admirably suited to the purposes of southern agriculturists.

The happy adaptation of the Devonshire Oxen, for the purposes of the farm, will be understood, when it is stated that 4 oxen have been known to plough 2 acres of ground in a day, and a team of them to trot at the rate of six miles an hour with an empty wagon.

Any person wishing to procure them can be supplied by addressing a letter post paid to the editor of the Farmer and Gardener.
nov 10 4t

FOR SALE.

A DURHAM Short-horn bull 15-16 blood. He is from a fine cow and got by Col. Powell's celebrated bull *Monk*—now two years old. Price, delivered at York, Pa., \$130.

Letters addressed to the editor post paid, will be attended to.
nov 10 2t

SEEDS AND TREES.

100 lbs white Italian mulberry Seed
1200 do dark red Onion
400 do early pale red do
500 do large yellow do
400 do early large white silver skin'd do. very superior, and a far more sure crop than any other white variety.

2500 do Cabbages of all the choicest kinds
2250 do Beets do do
450 bushels Peas do do
300 do Beans do do

Also, every other choice variety of Garden Seeds, all the growth of 1835, and venders and others will be supplied at very moderate rates, and a convenient credit.

A very large stock of Grass Seeds of every description, a few pounds of very large Teazel Seed, and all the choice new varieties of Potatoes, &c.

Chinese and Italian mulberry Trees of various sizes by the hundred or thousand. Also a hundred thousand cuttings perfectly prepared for planting.

Priced catalogues, both wholesale and retail, will be sent to every applicant. WM. PRINCE & SONS,
Linnæan Garden & Nurseries, Flushing, near New York.
ja 12 3t

FOR SALE,

A HEIFER rising a year old, in calf by Leon, with a pedigree which makes her a 15-16ths bred improved Durham Short horn—she is well grown, and prettily marked.—Enquire of the editor.
no 3

RUFFLE OATS,

For seed, may be had at the Maryland Agricultural Repository, Light street, Baltimore, by application to
Dec. 8 JAMES MOORE.

GRIST MILLS.

The subscriber has for sale at the Maryland Agricultural Repository, a few of those effective Grist Mills, so much approved of by gentlemen who have tried them. They are adapted to horse-power, and with ease will manufacture 3 bushels of grain into the most beautiful lively meal in an hour.
Dec. 8. JAMES MOORE 4t.

STOCK OF IMPROVED SHORT HORN DURHAM.

THE editor of the Farmer and Gardener, Baltimore, has for sale two 7-8 and four 3-4 bred cows, 2 full bred and seven 7-8 bred bulls of the improved short-horn breed. They are all fine animals whether regard be had to their milking or fattening propensities. Their pedigrees are indisputable, all tracing to the British Herd book. They will be sold low for cash, their excellence being considered. To any person, company, or society, who may want several, a great bargain would be given.

Letters addressed to the editor upon this subject, must be post paid.
nov 10 4t.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 40.

BALTIMORE, MD. FEBRUARY 2, 1836.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, FEB. 2, 1836.

The account which will be found in another column, of the *Alderney cow*, will be read with deep concern by all who take an interest in the pursuits of agriculture.

DR. NORTON AND HIS PROCESS OF MAKING WINE.

We alluded some weeks since to a bottle of very excellent domestic wine that we had been presented with, which had been made by Dr. Daniel N. Norton, of Richmond, Virginia, from a seedling grape bearing his own name. In that notice we expressed a wish that the Dr. would favor us with his manner of making his wine, and we have the pleasure of publishing in this day's paper the desired information. We feel assured it will be an acceptable treat to most of our readers; for from the high reputation the doctor's wine bears, his plan of converting the grape into liquor, will be readily sought after, by all who may be fortunate enough to have vineyards, or even a few good bearing vines. There is, perhaps, no gentleman in our country who has paid more attention to the subject than he has, and sure we are, there is not one who entered into the culture with more zeal, or with a mind more highly imbued with scientific acquirements. Under such auspices, it is not to be wondered at that he has succeeded, when hundreds of others have failed. He entered the arena with a spirit of perseverance which nothing could repress, and with a mind enlightened and ready to take advantage of every unfolding circumstance, so that the conquests he has made are but the necessary results of the combination of those unerring laws of nature and of art, which, when united, add so much strength to human exertion, and render the acquisitions of man at once easy and certain.

Dr. Norton has, we learn, prepared a small work for publication on the management of the vineyard and fabrication of wine, which may be comprised in 150 octavo pages. It treats also of

wines to be made from other fruits, and is adapted to the use of the scientific, as well as to the understanding of the plainest man in the community. As our country bids fair to become a vine-growing one, we think the publication of this work will be looked for with deep interest. The practical knowledge possessed by Dr. Norton on this particular branch of husbandry and the arts, his indomitable ardor in the walks of agriculture, and his peculiar fitness to prepare such a work, will lend no little aid in warming up the public curiosity to a state of excitement for the book, which we hope will be soon forthcoming; and we think we can promise him, in advance of its publication, that it will meet a ready market and anxious purchasers.

The subjoined paragraph is so full of instruction, so replete with the cause of hope for those who may have worn-out their land, that we give it place with no ordinary feelings of pleasure.—Here is a bed of white sand of an acre in extent, which by the application of nothing but fish, at a cost of about \$9 per annum, for the catching, is made to produce in a few years a crop of 400 bushels of apples and 2 tons of millet hay, equal in fact, in yield, to the very best land in the country, whether it be the Genesee Flats of New York, or the far famed prairies of the west. Why then, after such results, should the holder of soils originally good, or even *kind*, look upon his exhausted fields in despair? Should not this example animate him with hope, and fill him with ambition to excel his eastern brother in generous enterprise? Should he not feel his pride touched?—We think he should; for certainly, if so barren a body as white sand can be thus made productive by the application of a few loads of animal manure annually, there is no spot within the region of the Atlantic states that may not be made even more productive than it originally was, in the course of a very few years of proper culture.—Surely there is no excuse for those bordering on, or living contiguous to, the tide waters of those states in which there are so many fields of exhausted lands. The depositions of marl, and testaceous bodies, on the shores, the inexhaustible supplies of oysters and fish in the rivers and creeks, the periodical washing up of sea-weeds, all offer such countless resources to the farmer

of enterprise and industry, that no apology longer remains for a poor farm. He that so wills it, with the use of a clover lay, or a crop of buckwheat turned in, to form a kind of *pabulum* for the calcareous substances before referred to, or for lime, which can be had in almost every location of our country,—we say, he that so wills it, may improve his estate, and at a cost quite within his pecuniary competency, whatever his means may be.

[From the Providence Journal.]

AN EXUBERANT ORCHARD.

Towards the close of last summer we visited several times the orchard of Mr. Thomas Greene, of Pawtuxet, as one of the most beautiful exhibitions of fructification we have ever beheld.—Most of the trees were so laden with apples of the fairest quality as to require a prop under each limb, and some of them were so entirely curtained with fruit as to resemble a heap of apples resting upon columns. The orchard stood upon about an acre of ground, and contained thirty-five trees. Eight of these trees were small, from which, we have since been informed by Mr. Greene, he gathered only from a bushel to a bushel and a half to a tree. From three of the other trees he gathered 27 bushels each. The whole product of the orchard was a little over 400 bushels, out of which, after having dried 12 bushels, he made 12 barrels of cider, and sold 60 bushels of fall apples, Mr. Greene informs us he has 220 bushels of winter apples in his cellar. During the summer he also took two tons of millet hay from the same acre of land. But what is the most remarkable fact in the history of this orchard is, as we are assured by Mr. Greene and some of his neighbors, that when the land upon which this orchard stands came into his possession, it was an unproductive, drifting sand flat, upon which there was no vegetation except such bushes as had been planted upon it by his father to prevent the wind from blowing the sand about. Outside of the orchard fence the land is still a naked white sand. But this sterile waste has been brought to its present state of almost unexampled fertility, solely by the application of fish as a manure. Mr. Greene says he ploughs in about 45 barrels of fish per year, costing generally from eight to nine dollars, and that if he should omit this application of manure for a few years, the soil, which is now of a dark yellow color, would doubtless bleach out again to the quality of white sand, and become unproductive as ever. So much will good husbandry do towards causing "the desert to blossom like the rose."

Governor Morehead, of Kentucky, has recently been presented with a fat ox weighing 3,000 lbs. We would have been better satisfied had the breed been stated.

WORK FOR FEBRUARY.

ON THE FARM.

Though February is the shortest month in the calendar, it is still the most dreary and tedious, and generally speaking, the coldest month in the year. Once in every five years, by the common consent of its sisters, it assumes airs to itself, and as if not content with inflicting its rigors upon humanity during eight and twenty days, of ordinary despotism, like a thorough paced monopolist, it seizes upon the vagrant day, made up out of the surplus time of the four preceding years, and appropriating it to itself, prolongs its icy power and glories in the tyranny of even a single day.—But dreary, and tedious and icy, as it may be, it is a month in which the judicious and industrious farmer may do much to promote his success the approaching season, and give security to the products of his labor.

If he has new fences to make, or old ones to repair, and has not yet felled his *posts* and *rails*, he should lose no further time, but send his force into the woods, and cease not until his piles of morticed posts and dressed rails, admonish him that more than a sufficient number of each have been provided. The ends of the posts intended to go into the earth must be charred sufficiently long to allow three or four inches of the burnt part to be above ground; the rails and posts should be barked, and when the fence is set up, both should be whitewashed, with a wash highly saturated with salt and alum, taking good care not to spare that part of the rail within the mortice. This will alike prevent dry rot and preserve the wood from the ravages of its natural enemy, the worm.

Your fences, out-houses, barns, stables, cow sheds and all other buildings on your farms, must be thoroughly examined, and if needed, repaired; proper attention to these duties *now*, will save you much time and labor at a more advanced period of the year, when you cannot without great inconvenience give them either the one or the other.

Look to your work horses, mules, and oxen, and see that they be not neglected. Let the curry-comb, brush, and wisp of straw, do ample justice to their hides; if these be faithfully administered much less provender will answer, though in no case should you give them stinted allowances: good beds for them to recline on at night, will not only contribute to their general comfort, but will promote their capacity for taking on fat, and consequently of improving their strength and power of enduring labor. You should recollect that by pushing your working cattle a little now, they will be in fine condition in the spring to

meet the new demands that will be made upon them, and then, instead of looking at your beasts of labor with an averted eye and in shame, you may cast upon them the look of ambition and pride—of that ambition and that pride, which a consciousness of its being the offspring of an enlarged humanity, renders acceptable alike in the sight of God and man.

To your *milch cows*, we would fain, once more direct your attention. Many of them will this month give birth to calves, and, if our previous admonitions have not had the desired effect, let us conjure you by the calls of humanity,—and by that too often stronger appeal—interest, to delay no longer in providing all, and especially those that may be in the situation we describe, with warm comfortable beds at night, and generous feeds of roots boiled or steamed, with an admixture of either rye or corn meal, three times a day. Those of your cows that are in calf, as they approach the period of parturition, must be provided with separate apartments, where they will each have plenty of room, and can be protected from the obtrusion of the other stock. If well fed at this crisis in their affairs, and provided with good bedding and other attention be paid them, little fear need be apprehended of a safe delivery in the hour of their travail, as *nature*, ever attentive to the claims upon her, will alone, nine cases out of ten, bring the invalids through their troubles. For two or three weeks before each cow's calving, her feeding should be full and generous, and the usual warm drinks on calving must be freely administered.

If you have any heifers carrying their first calf, let them be placed in stalls at night, so that they may be curried, brushed and otherwise handled, and thus rendered familiar to the human touch; they will be thus made much less difficult to be broken to the pail. Indeed, if proper pains be taken, all the breaking may be performed before they come to the pail. Let the person who has charge of their feeding, after giving them their allowances, take his curry-comb and proceed gently to work, patting the animal on the neck with one hand as he applies the comb with the other, using soothing words to her as he does so; and after he has thus passed over her neck, body, and legs, with the comb, let him take a brush, or wisp of straw, and apply it, whichever it may be, freely; when he has concluded these operations, let him insert his hand upon the heifer's udder, using at the moment some cheering words; if she bear that, then let him gently press first one *teat* and then another, until he has passed over the whole. If she bear this well, don't tax her patience too

much by prolonging it, but on ceasing say something flattering and in a soothing tone to her.—Should she kick, however, a harsh tone and prompt chiding must be adopted. With respect to the treatment of the heifer after calving, it should be similar to that pursued towards the other cows. *But if you would have her a deep milker*, you must keep the calf away from her after the third day, give her *plenty of warm succulent messes*, at least three times a day, always taking a portion of the milk away from her before you turn her into her calf, which should be done thrice a day; thus, between the milk-maid and the calf, the young mother will be stripped, a thing as necessary to increase her habit of secreting milk, as the keeping the calf from her is to the swelling and giving volume and capacity to the milk vessels, and the consequent distension of the udder: without all of which, she never can be a deep milker.

The *sheep* must now be generously taken care of. In addition to their usual allowance of fodder or hay, they should receive a half a gill of corn meal a head, together with a portion of turnips or potatoes.

The *breeding sows, shoats* and *pigs*, must be attended to; their pens must be kept clean and warmly bedded, and they receive good allowances of feed: boiled roots and meal of some kind or other.

The horses, mules, oxen, cows and sheep should be *salted* twice a week: and in troughs to be placed in the barn yard, where, in dry weather and fine days, they should be turned; let there be large lumps of chalk placed, to which they may resort at their pleasure—and in their feeding troughs, in one end of them, there should be constantly kept a mixture of tar and sulphur.

If your corn be not all shelled, it is time that you were bestirring yourself to that end. And here it seems proper to ask you: have you provided yourself with a vertical iron wheeled corn sheller?—one of those potent little fellows, that will shell you out 20 bushels an hour—if you have not, get one and practice economy; for he that saves time gains money. We are desirous to get the corn off the ears, because we hold it bad economy to feed in the ear; indeed, we consider it wasteful to feed grain in any other form than that of *meal*—and because the cobs if crushed, will make a food fully two-thirds as nutritious as the corn itself.

Your *orchard* should claim your attention.—Look through it and wherever you find *moss* growing, whether it be on the trunk or on a limb, it must be rubbed off. It may be done with a

coarse cloth or *hard brush*—the latter best; and let the parts where this excrescence grows be scraped and washed with soft soap—apply the soap with a white wash brush. If all your trees, whether affected with moss or not, were rubbed and washed with soap, you will recognize the good done them next spring, in the renewed vigor of the bark and exemption of the trees from vermin. As to pruning, the less of that that is done the better. Such limbs or branches as from injury may be *dead*, should of course be taken off with a sharp saw, and the face of the wound smoothed off with a well set drawing knife. All wounds thus made, should be immediately covered with the following composition:

Take 1 quart of tar, quarter pound of bees wax, $\frac{1}{4}$ lb. of rosin, 2 oz. of sulphur, and 1 lb. of pulverized plaster of paris; the tar, bees wax, rosin, and sulphur, to be melted and well incorporated over a slow fire, and then to be thoroughly mixed with the plaster of paris.

This mixture is to be put on with a painter's brush so as to cover the entire surface of the wound. Two or three coats will do no injury.

These recommendations apply alike to your apple, pear and peach, and plum trees, generally.

Get all your ploughs, hoes, spades and other tools and implements of husbandry ready, so that when the spring opens and the season for using them arrives, you may not have to delay your farm operations for the want of them. Recollect this—you should always be ahead of your work.

IN THE KITCHEN GARDEN.

Sow Cauliflower seed in a hot bed protected by glass lights.

The cabbage plants which were sown last month should be thinned out, and the drawn plants be transplanted in another hot bed, at the distance of three or four inches apart.

The sooner you sow your cabbage seed the better. Sow in a hot bed and by the time the frost is out of the ground, you will have plants fit to put out, and thus secure yourself an early supply of this most excellent vegetable.

You may sow towards the latter end of this month on a *warm* and well protected border, some celery seed for an early supply. Prepare the bed by digging it deeply, manuring well and pulverizing *finely*. After you have thus prepared your bed, rake off into the alley about $\frac{1}{4}$ inch in depth of the top, sow your seed and take a spade and cover the seed with the earth you had drawn into the alley.

Sow radish, spinach, lettuce, carrots, parsnips, beets, parsley seed, and any other garden seeds that you may desire to push forward; but you

must take care that no pains be spared to protect them from the frost.

Towards the end of this month you should prune your grape-vines, unless the weather be very severe, in which case it may be delayed a week; but in no event beyond the first week in March.

IN THE FLOWER GARDEN.

In the latter part of this month, if the weather should be mild and dry, you may sow many sorts of hardy annual flower seeds in warm borders, such as larkspur, flos adonis, scarlet pea, dwarf poppy, nigella and flowers of the character of these.

Most shrubs should be pruned towards the end of this month: those which bear their flowers on the wood made last season, will of course be pruned with great care. Climbing shrubs must also be pruned, as honey suckles of all kinds.—Hardy roses which were not pruned in November, must now undergo the process. Shrubs may be transplanted as soon as the state of the ground will admit of it; but if the earth remains frozen, it will be better to defer it to the next month, as the roots thus disturbed and placed in frozen earth would likely be killed.

The following we extract from a communication in the *Tennessee Farmer*, being in part the results of certain experiments made by one of the agricultural correspondents of that paper. While we insert it with pleasure, we feel constrained to express our regret that more farmers do not report the result of their own experience, for however, necessary the study and application of the great principles of husbandry are to the successful culture of the earth, the knowledge of the peculiar modes of carrying them into practice, as severally pursued, is equally so. By this means we are enabled to arrive at just conclusions as to the merits of each, and thus enlightened, to settle down upon that which is best adapted to economise time and labor.

[From the *Tennessee Farmer*.]

In the 6th No. of the *Farmer* are several queries on the subject of sowing and saving clover seed, and the preparation of clover land for a wheat crop; to which, I have not observed full answers. I have not succeeded well in raising clover seed, but presume my want of success was principally owing to waste in gathering—as to sowing, I think clean seed is to be preferred—because, it can be distributed more evenly over the ground; but if enough chaff is sown in calm weather, it will come well. Wheat grows better after clover than any other preparation of the land, I have experienced. The most approved method here is to turn in the Clover in July or August, harrow in September, and sow, and plough in the wheat, early in October. It is, however, a great saving of labor, and perhaps no loss of crop, to break up somewhat later, and sow and harrow in the grain,

without disturbing the sod. I have seen this plan recommended, as allowing time for the seed to ripen, when it is desired to renew the clover crop with the seed then turned in. I am rather of opinion, also that on the latter plan we might sow wheat earlier than usual, and thereby avoid the rust, which in some seasons is very destructive to the crops before ripening, and it may be worthy of inquiry, with us, whether Hessian flies are less numerous in clover land than other—or whether the clover or its roots may not afford nourishment for them, by which they are earlier at maturity, and cease their depredations before the wheat gets up to admit a deposite for their eggs—or, may it not be, that the kind of nourishment supplied by clover to the young wheat is so favorable to its growth, that the wounds inflicted by insects are soon healed, and produce but little injury.

I have not been successful, except in one instance, in renewing my clover crop without a new sowing—that instance. I will detail to you, in the hope that it may lead to some discovery of some of the causes of my former failures.—Having a field of good clover, from which two or three crops of hay and some seed had been taken, I had determined to let it grow up last year, and, (what I have never yet done) turn in a full crop for a wheat fallow, but in the winter I discovered a large proportion of the clover root thrown out by the frost, and lying on the surface of the ground; I then concluded to break up for a corn crop, which was done in February, and before planting, the heavy harrow was passed over it—which was certainly better than one ploughing of the corn, of which I made a good crop with two ploughings and one harrowing with the small harrow—not satisfied to give up my clover, and having but little seed to sow, and suspecting that the seed turned in was covered too deep for vegetation, I got the ground broke up (with large ploughs) in January last, as deep as it was the preceding winter, and before the wet weather (which set in the last of January) ceased, so as to admit of sowing oats, being some time in March, my ground was green with young clover—a good deal of which, however, was killed by harrowing in the oats, and the dry frosty weather which succeeded, yet the most of the ground is now well set—the oat crop is good, but I have no doubt would have been better had the oats been lightly ploughed in, and could the sowing have been performed in February, the clover would also have been much more regular.

G. H.

DR. NORTON'S METHOD OF MAKING WINE.

Magnolia, near Richmond, Jan. 18th, 1836.

Dear Sir—The highly flattering notice you have taken of my wine, in the 34 No. of the *Farmer and Gardener*, has but this moment met my eye; and I hasten to give you the information you require respecting its fabrication. The fruit produced by Norton's Virginia seedling vine, will usually ripen sufficiently for the press about the 15th or 20th of September—all which time, if the weather permits, they are gathered for the purpose of making wine, and as *every berry matures perfectly at the same period and the grape is not subject to rot or any species of decay*, they do not require the tedious manipulation, which is given to all other fruits before pressure, or rather before

the breaking of the skins, which alone is necessary to make wine of the highest grade. The fruit gathered, stem and all, is subjected to the action of a wooden roller, sufficiently heavy to crush the berry, without breaking the seeds.—This roller acts upon a layer of fruit 5 or 6 inches thick, spread in a large shallow square shaped box, one foot in height; and the roller is drawn backwards and forwards, by a bifurcated handle, and the fruit is occasionally turned over, until you find every berry mashed, so as to admit the efflux of the juice. Thus treated, the mass is thrown into a cask placed upright, with the head removed, and at such a distance from the floor or ground, as to permit your drawing off the must most conveniently—continue to add more and more fruit treated as above stated, until your cask is filled to within 2 feet of the top, then nail strips of wood across the inside of the cask at the distance of half an inch the one from the other, to prevent the rising of the murk to any great degree above that point—then cover over the cask with a blanket, to prevent the escape of the carbonic acid gas, the aroma, and other fugacious principles, which add to the flavour and strength of the wine—then watch the process carefully, and as soon as you find the murk or crust formed in the top of the cask, to sink in the smallest degree—draw off the liquor from the mass of skins, pulp and stems, as long as it will run tolerably clear—which put to itself in a cask, having previously burnt 8 or 10 inches of sulphur match as thick as the little finger in the same—let this cask filled to within 3 inches of the bung hole, have a situation in a cellar or other cool place, and continue to draw it from time to time into casks, matched in a slighter degree, than the first mentioned—this process may be repeated to advantage 2 or 3 times in the fall and once at midwinter—when suffer the wine to remain undisturbed to effect its maturity. Now let us return to the cask from which we have drawn the clear liquor—which is to be pressed as you would the pulp of apples, and treated as the liquid which spontaneously parted from the bruised fruit, except that it requires stronger matching and more frequent racking, to prevent its running into the acetous fermentation. The sulphureous taste and smell, however strong at first, will gradually disappear.—This last wine will be inferior to the first, both in flavour and strength.*

Your's, with sentiments of the highest respect,
DANL. NORBORNE NORTON.

*The bung hole of the casks are to be slightly closed until midwinter when they are to be driven tightly down—and a small vent hole made in the upper part of the cask which is to be opened for 8 or 10 minutes (on the return of the spring) every 5 or 6 days, and the same care continued until the cool weather sets in—after which time there will be no danger of the casks bursting from the accumulation of gas. D. N. N.

Silk.—We have been shown (says the Philadelphia Commercial Herald) a sample of Satin Vesting, entirely the growth and manufacture of Beaver county, Pa. which for beauty and goodness will compare with almost any thing of the kind imported.

GLEANINGS FROM ENGLISH WORKS.

THE ALDERNEY COW.

From the British Farmer's Magazine for September, 1835.

It is the opinion of those best informed upon agricultural matters, that the Jersey and the Alderney cow are precisely alike, both distinguished by the fine curved taper horn, the slender nose, the fine skin and the deer-like form, and both preserved in their purity by breeding in and in.

Quail, in his report, truly says, that "next to the possession of *vraic* (sea weed for manure and firing) the treasure highest in a Jerseyman's estimation, is his cow." It is now as it was in Quail's time. The cow is the object of his chief attention; and his care and affection for it may be compared with those of a German for his horse.

It is true, says Quail, that in summer she must submit to be staked to the ground, but five or six times in the day, her station is shifted. In winter she is warmly housed by night, and fed with the precious *parsnip*; when she calves, she is regaled with toast, and with the nectar of the Island, cider—to which powdered ginger is added.

The high estimation in which the Jersey cow is held by its possessor is shewed by the Island legislature, which has preserved the purity of the breed by special enactments. An act was passed in the year 1789, by which the importation into Jersey, of cow, heifer, calf, or bull, is prohibited under the penalty of 200 livres, with the forfeiture of boat and tackle; and a fine of fifty livres is also imposed on every sailor on board who does not inform of the attempt. The animal too, is decreed to be immediately slaughtered and its flesh given to the poor.

The number of cows every where dotting the pastures of Jersey, add greatly to the beauty of the landscape; though when one passes near to them, the discovery that they are tethered, somewhat decreases the pleasure we have in seeing them. In apple orchards, however, in which the under grass crop is always used as cow pasture, it is necessary to tether the animal; and not only so, but to attach also the head to the feet, that the cow may be prevented from eating the apples, which she would be quite welcome to do, were it not that they might injure her.

All over England, the ALDERNEY cow, as it is generally called, is celebrated not only for its beauty, but for the richness of its milk and the excellence of the butter made from it. Extraordinary milkers, even among Jersey cows, are sometimes found. I have heard of three cows on one property yielding each from sixteen to eighteen quarts per day, during the months of May and June, and of thirty-six pounds of butter being made weekly from their milk. I have heard, indeed, of one cow yielding twenty-two quarts, but these are, of course, extreme cases. The general average produce from Jersey cows may be stated at ten quarts of milk per day, and seven pounds of butter per week. It is stated that in summer from nine to ten quarts produced one pound of butter, and that in winter, when a cow is parsnip-fed, the same quantity of butter may be obtained from seven quarts,—an extraordinary produce certainly. Two verges and a half, or somewhat better than an acre of good land, is considered sufficient for a cow's pasture. The

price of Jersey cows has considerably fallen during the last fifteen years. A good cow may now be purchased for £12—a prime milker will fetch £15, and the average may be stated from £8 to £10.

Guernsey.—In this Island the cows are universally tethered, as in Jersey, and are moved, watered, and milked, three times a day. From about the beginning of November, during the winter, parsnips and mangel wurtzel are given to the cows at night.

There are few points of Island jealousy carried farther than that which regards the breed of cows of Jersey and Guernsey. It is certain, however, that of late years, greater attention has been bestowed upon the breed of cattle in Guernsey, than in Jersey; and the law forbidding the importation of any foreign breed has been scrupulously acted upon. A Guernsey farmer would not, upon any account, admit a Jersey cow on his grounds. In England no difference between Guernsey and Jersey cows is understood, but the number of the latter exported being by far the greater, they are generally better known by the jobbers. The Guernsey cattle are considered larger than those of Jersey; and it appears from the evidence of the clerk of the market, that an ox has attained the weight of 1,500 lbs. Quail, in his report says, those of 1,200 lbs. or 60 score, appear not unfrequently. I am told that a Guernsey cow, when its birth is distinctly known, and when offered among those best able to judge, fetches a higher price than the Jersey cow. This may possibly be owing to the larger size; for there can be no doubt, that greater size, supposing all the other points equal, gives the animal an advantage.

The following is the description and standard of excellence of a Guernsey cow, transmitted to me by one well versed in those matters:—the points of excellence are, 1. *Pedigree* of the parents; yellow ears, tail, and good udder. 2. General appearance, color cream, light red, or both, mixed with white. 3. Handsome head, well horned, and bright and prominent eyes. 4. Deep barrel-shaped body. 5. Good hind-quarters and straight back. 6. Handsome legs and small bone. I believe, however, that this classification of points of excellence, is not rigidly adhered to. I have seen it stated of the Guernsey cows, young and old, that the general average is rather more than 365lbs of butter in the year, being equal to one pound of butter, or eight quarts of milk in twenty-four hours.

Alderney.—In my rides I often paused and drew up my horse to look over the walls at the pretty little Alderney cows, whose beauty and qualities have so greatly distinguished their native island. My attention was particularly directed to some acknowledged as fine specimens; and to me they seemed well to deserve the praises that had been passed upon them. I found it, however, every where admitted, that there is but little distinction between the Alderney and the best specimens of the Jersey cow. The Guernsey cow, though also of the same breed, is, as I have observed, a larger animal, and in the opinion of many, finer, though certainly not more comely.

I had been told in the other islands, that the true Alderney breed, such as I should find it in the Alderney, is a black and white; but I did not

find that the people of Alderney adopted this criterion of purity of breed: Red and white, and brown and white, I found equally common, and the choicest specimens shown me, were white and reddish chocolate colors; but not with too great a preponderance of white. The Alderney people attend more to the short curved horns, than to the color, and it was stated to me by a gentleman who had paid great attention to the subject, that there is no indication of a true Alderney cow so certain, as prominent sparkling eyes; and in this the Alderney cow offers a strong contrast to other cows; for the eye of a cow is generally of a tranquil and sleepy expression.

Abridged—from English Channel Islands.

THE SILK CULTURE.

Extract from a letter from Dr. Thomas White, of Mount Pleasant, to a citizen of Steubenville, Ohio, dated

Mt. Pleasant, Dec. 13, 1835.

DEAR SIR—Your's of the 4th inst. came duly to hand: and in reply, I am happy to inform you that I have succeeded very well—and am fully convinced that the culture and manufacture of silk will, before long, become one of the most important pursuits that have ever claimed the attention of our citizens. In my view, there are three reasons why it should become so.

1st. It must, and will most inevitably, become a great source of wealth to all who turn their attention to it, especially to the farming part of the community, if they can be encouraged to engage in it. To them, it will be attended with but little expense to raise the cocoons—a female of an ordinary constitution will be able to tend from 30 to 45 thousand worms, which, if well fed and properly taken care of, will yield from ten to fifteen pounds of reeled silk, or from ten to fifteen bushels of cocoons, for which we will give them from \$4 to \$4 50 and \$5 per bushel according to quality; or manufacture them into goods, agreeably to order. Good cocoons will yield one pound of reeled silk per bushel; each pound will make 12 square yards of good substantial goods, worth from \$1 to \$1 50 per yard. Thus 30,000 worms will produce ten pounds of silk, or 120 yards of goods—and supposing it takes two thirds to pay for the manufacture, it will leave the producer forty yards of goods: and counting the labor at one dollar per week for five weeks, (which will be the time employed) will reduce the price of the silk goods to 12½ cts. per yard, or \$1 50 per pound. —Now I would ask you, and every farmer in our country, by what means can our females clothe themselves cheaper than by feeding silk worms? I know of none. It is only the business of five weeks for a female to provide herself with forty square yards of goods, worth more than one hundred and twenty yards of the best cotton goods she can find in the market—these are no visionary dreams; but practical facts founded upon experience. This season I raised enough for about three hundred yards of silk, which did not cost me more than 12½ cts. per yard to raise the cocoons, counting my labor at one dollar per day, and the labor of one hired female and my daughter each, at a dollar per week. It is the tedious process of manufacturing silk, that will, for a time, make it expensive—but this expense falls on the

manufacturer, not on the farmer or silk grower. As it respects the food for the worms, I am unable to see any great superiority that the Italian leaf has over our own native leaf. I am inclined to believe that the principal advantage the Italian has over the native, is, that they can be brought into use quicker, as they are much more thrifty in their growth than our native trees. I fed mine this season principally from the native tree, and expect to feed as many as one million next season from the same source: my grove of Italian trees being too young to yield much food. Our native tree of the middle size will produce food enough for 3000 worms, or a pound of silk per tree—each tree that a farmer may have, is worth more to him than two sheep."

Steubenville Herald.

REVIEW OF CHEMISTRY.

Review of Chemistry applied to Agriculture. By JOHN ANTONY CHAPTAL, Count of Cantaloup, Peer of France, Member of the Institute, &c.

This work is laid before the American public as a more modern and perfect treatise of agricultural chemistry, being the results of the labors and studies of an eminent French chemist during many years' experience in such pursuits.—Sir Humphrey Davy's Lectures were published in 1813, and ten years afterwards, appeared the first edition of the present work; and, in 1829, a second edition, increased in several particulars.—Although almost entirely of a local character, there are, nevertheless, several points of interest to every agriculturist applicable to all countries; and some subjects, though often treated before, yet deserving renewed attention. The atmosphere and its influence on vegetation; the nature of soils, and their action; the nature of manures; the vegetable economy and laws relating to the physiology of plants; improvement of soil; succession of crops; treatises on the products of the farm; cultivation of the beet for sugar—are all particularly considered. One great merit is its simplicity and great plainness—the reduction of philosophical theory to simple truth.

Chemistry, as indeed the other sciences, have been too little regarded in connexion with the culture of the soil, and yet thousands are the errors which a better knowledge of what concerns the material on which we expend our labour, might be avoided by a better and closer attention to them. Seldom any thing but long experience, and this too often by the result of costly experiments, acquaint us with the nature of the soil, and what crops will best succeed on this or that land; or whether it be more or less favorable to the increase of some insect or deleterious parasitic plant, which effects the produce. We could wish that different notions respecting this subject existed, and a yet more general diffusion of the correct and modern system of husbandry. Nor do these remarks apply only to our agriculturists, in the common meaning of the term, but those who minister among the more delicate productions of the garden, would do well to make themselves acquainted with the secret laws which govern the subjects of their care. Invested with these, they may render the barren wilderness a garden, and, like some magician of old, command the rich treasures of the earth to come forth at their bidding.

Speaking of the nature of soils, our author remarks:

"In order that a plant should flourish in a soil, it is not always sufficient that the earths composing it are of the right kind, or suitably proportioned; it is necessary to unite other circumstances which are not always to be met with; for example, the arable soils which are based upon rocks, vary considerably in depth; and the thickness of the bed not only exerts an influence upon the powers of vegetation, but determines the kind of plant which can be cultivated upon it. The bed of earth ought to be from ten to twelve inches in depth for grain, and much more than that for clover, and saintfoin; for trees, it must be much deeper than for these, otherwise their roots, running but little below the surface of the ground, will exhaust their shoots to a great distance, and thus exhaust the strength of a large portion of soil. Trees are often found upon the side of mountains, which are almost entirely devoid of a covering of earth, but in this case the chinks and crevices of the rocks supply the place of earth, or rather the rocks are of so spongy and porous a nature, as to permit the roots to penetrate them. In the Cevennes and Limousin, the most beautiful chesnuts are planted upon granite and free-stone; and the famous vines of the Hermitage prosper in a soil of granite decomposed at the surface."

Might not this be a useful hint in covering the barren sides of many of our New England hills, by planting among the debris which are broken from the tops? for we know that considerable excellent soil rests among the loose fragments, and moisture is longer retained than elsewhere. The grape flourishes in volcanic countries, among the loose and decomposing lava, with a luxuriance seldom equalled, and many of our native plants, as the *Rubi*, are found in great luxuriance in such places.

Again, on the subject of manures, are many important facts:

"The nutritive manures are those which contain juices or other substances, which, being dissolved in water, or otherwise divided to the most minute degree, are capable of being drawn into the organs of plants. All the vegetable and animal juices are of this description."

"The most useful art, perhaps, in agriculture, and that which requires the most care, is the preparation of dunghoops. It requires the application of certain chemical principles, which it is not necessary for me to explain, since it is sufficient to point out to the agriculturist the rules by which he should be governed in his proceedings, without requiring of him an extensive knowledge of the theory upon which they are founded.

"Solid substances, whether animal, vegetable, or mineral, do not enter into plants unless they are previously dissolved into water, or are drawn in with that fluid in a state of extreme division.

"Animal and vegetable substances which are, by their nature, insoluble in water, may, by being decomposed, form new soluble compounds, capable of furnishing nourishment for plants.

"Animal and vegetable substances deprived by the action of water of their soluble particles, may, in the course of their decomposition, form new compounds susceptible of being dissolved."

"The clippings and parings of horns form an excellent manure, of which the effect is prolonged

during a succession of years, owing to the difficulty with which water penetrates them, and the little tendency they have to ferment.

"A very good manure is likewise formed from wool. According to the ingenious experiments of M. Hatchett, hair, feathers, and wool are only particular combinations of gelatine with a substance analogous to albumen; water can only dissolve them by means of fermentation, which takes place slowly, and after a long time.

"One of the most surprising instances of fertile vegetation that I have ever seen, is that of a field in the neighborhood of Montpellier, belonging to a manufacturer of woollen blankets. The owner of this land causes it to be dressed every year with the sweepings of his workshops; and the harvest of corn and fodder which it produces are astonishing.

"It is well known that the hairs of wool transpire a fluid which hardens upon their surface, but which possesses the property of being easily soluble in water. This substance has received the name of animal sweat; the water in which wool has been washed contains so much of it, as to make it very valuable as a manure.

"A wool merchant in Montpellier, placed his wash-house for wool in the midst of a field, a great part of which he had transformed into a garden. In watering his vegetables, he had used no other water than that of the washings; and the beauty of his productions was so great, as to render his garden a place of general resort. The Genoese collect with care, in the south of France, all they can find of shreds and rags of woollen fabrics, to place at the foot of their olive trees."

"In the south of France, where they raise many silkworms, they make great use of the larvas, after the silk has been spun from cocoons. They are spread at the foot of the mulberry and other trees, of which the vegetation is in a languishing condition; and this small quantity of manure reanimates them surprisingly. Upon distilling some of these larvas, I found more ammonia than I have ever met with in any other animal matter."

The supposed *phenomenon* of the reappearance of seeds in lands very many years after sown, and hence the absurd theories of spontaneous generation, and the like, are thus overthrown by the true state of the vegetable vitality.

"Germination cannot well be carried on, unless the atmospheric air has access to the seed, which cannot be the case if the seed be buried too deeply in the ground, or if it be sown in a compact soil and closely covered over.

"It likewise follows, from these principles, that when the earth remains a long time, covered with standing water, the seeds must decay, and also, that a seed placed in dry earth cannot germinate unless it be moistened.

"The impossibility of a seed's germinating, when too deeply buried in the ground, explains why we sometimes see, after deep tilling, plants making their appearance, of the same kind as those which had been cultivated upon the soil several years before. The state of the earth, as it regards moisture, at the time of sowing, furnishes a reason independent of the action of heat, why seeds are a longer or shorter time in sprouting."

Influence of carbonic acid on vegetation:

"The pieces of wood which support the roof

of the long gallery which conducts to the beds of coal in the coal mines of Bousquet, in the department of Beziers, were loaded with that species of mushrooms which usually fixes itself upon the trunks of old trees; the entrance of the gallery is very light, but the light gradually diminishes till it is lost in total darkness. I was much struck, in passing through this gallery, with the different appearances presented by the mushrooms in the various degrees of light; those at the entrance were yellow, and their texture so compact that they could hardly be broken by the hand. As I advanced, the reddish yellow color grew gradually fainter, and the texture of the plants more soft and spongy, till at the bottom of the gallery, where a ray of daylight never penetrates, I found the mushrooms, though as light as those at the entrance, perfectly white, and nearly without consistency, so much so, that upon pressing them with the hand, they were found to yield much liquid, and but little fibrous matter. I filled several bottles with these, and took in my hands some of those from the Middle and entrance of the gallery. A comparative analysis of these various portions afforded me, from those which grew at the bottom of the gallery, only water saturated with carbonic acid, a small quantity of mucilage, and a little parenchymous fibre swimming in the liquid. The proportion of acid was much less, and that of ligneous fibre more considerable, in the mushrooms plucked from the middle and entrance of the gallery, particularly in the last. Those from the dark part of the gallery contained only the elements of nutrition not elaborated; whilst in the other, the process of assimilation was carried on more or less perfectly, in proportion as light and atmospheric air had access to them to facilitate vegetation; otherwise, as carbonic acid was most abundant in those plants which grew in darkness, their texture ought to have been the most thoroughly impregnated with it."

On the succession of crops, as superseding the old custom of suffering ground to lie fallow, in order to renovate it, we are told:

"A good system of cropping is the best guarantee of success that the farmer can have; without this, all is vague, uncertain and hazardous. In order to establish this good system of cropping, a degree of knowledge is necessary, which unhappily is wanting to the greater part of our practical farmers. I shall here state certain facts and principles, which may serve as guides in this important branch of agriculture."

Principle 1. All plants exhaust the soil.

" 2. All plants do not exhaust the soil equally.

" 3. Plants of different kinds do not exhaust the soil in the same manner.

" 4. All plants do not restore to the soil either the same quantity or the same quality of manure.

" 5. All plants do not suffer weeds to fill the soil equally.

From such principles carried into detail, the author lays down the following conclusions:

"1st. That however well prepared a soil may be, it cannot nourish a long succession of crops without becoming exhausted.

"2 Each harvest impoverishes the soil to a cer-

tain extent, depending upon the degree of nourishment which it restores to the earth.

"3d. The cultivation of spindle roots ought to succeed that of running and superficial roots.

"4th. It is necessary to avoid returning too soon to the cultivation of the same or of analogous kinds of vegetables, in the same soil.

"5th. It is very unwise to allow two kinds of plants, which admit of the ready growth of weeds among them, to be raised in succession.

"6th. Those plants that derive their principal support from the soil should not be sown, excepting when the soil is sufficiently provided with manure.

"7th. When the soil exhibit symptoms of exhaustion from successive harvest, the cultivation of those plants that restore most to the soil, must be resorted to."

Enough has been quoted to show the spirit and character of the book before us. We will only add, for the gratification of our floral and horticultural friends, that a very interesting North American plant bears the name of the author, we mean "*Chaptalia tomentosa*." (Ventenat)—R.

RULE FOR MEASURING CORN.

The correctness of this rule is well known; those who may hereafter have occasion to measure corn in wagons, carts or cribs, will find it much easier to observe the following rule, than the one usually resorted to:

RULE.—Measure correctly the length, breadth and depth of the cart or wagon body containing the corn; reduce the length, breadth, and depth to the lowest denomination, (viz. inches;) multiply the length by the breadth, and the product by the depth—then divide by 12, by 12, and by 12.

EXAMPLE.—Say a cart load.—Suppose the body be five feet two inches, that is sixty-two inches, in length, two feet four inches, or twenty-eight inches in breadth, and two feet one inch, or twenty-five inches in depth:

Length,	62	inches
Breadth,	28	do
	496	
	124	
	1736	product
Depth,	25	inches
	8680	
	3472	

Divide by 12)43400

by 12)3616

by 12)301

Which gives 25 feet 1 inch c. m.

It will be seen that the fractions are omitted; and by reference to the table below, it will appear that twenty-five cubic feet contains ten bushels and seven gallons of corn.

TABLE.

Feet.	Bushel.	Gall.
1 c. ft. contains of corn in ear near	00	31
2	00	62
3	1	2
4	1	6
5	2	1
6	2	4

7	-	-	-	-	-	3	0
8	-	-	-	-	-	3	3
9	-	-	-	-	-	3	7
10	-	-	-	-	-	4	2
11	-	-	-	-	-	4	6
12	-	-	-	-	-	5	1
13	-	-	-	-	-	5	5
14	-	-	-	-	-	6	1
15	-	-	-	-	-	6	4
16	-	-	-	-	-	6	7
17	-	-	-	-	-	7	3
18	-	-	-	-	-	7	6
19	-	-	-	-	-	8	2
20	-	-	-	-	-	8	5
21	-	-	-	-	-	9	1
22	-	-	-	-	-	9	4
23	-	-	-	-	-	10	0
24	-	-	-	-	-	10	3
25	-	-	-	-	-	10	7

Vincennes Gazette.

FRENCH MODE OF FATTENING CATTLE.

In some parts of France, according to an English writer on Agriculture, they fatten with maze, [Indian corn,] "but in order to render it tender, they pour boiling hot water upon it, cover it up close, and give to the cattle the same day, and in this way it is a most excellent fattener, both of cattle and poultry. But in order to make them fatten sooner and better, they give them every night, and sometimes of a morning, a ball of pork grease as large as an apple; they say this is both physic and food and makes them thrive the better.

"The fact of hog's grease being given, was confirmed at Souilliac; it is given to increase the appetite, and answers so well, the beasts perfectly devour their food after it, and their coats become smooth and shining. The most fattening food they know for a bullock, is walnut oil cake. All here give salt plentifully, both to cattle and sheep. And this practice is, more or less, universal through the whole kingdom.

"In Flanders, from Valenciennes to Orchies, for fattening beasts, and for cows, they dissolve linseed cake in hot water, and the animal drinks, not eats it, having various other food given at the same time, as hay, bran, &c.; for there is no point they adhere to more than always to give a variety of food to a fattening beast."

ON AGRICULTURE.

Agriculture, whether considered in reference to health, pleasure, moral influence, security, independence or respectability, will not suffer in comparison with any other employment in which mankind are engaged; and indeed, in most of these respects, it claims a decided pre-eminence over every other pursuit. Nothing is so well fitted to strengthen and invigorate the frame and constitution as exercise in the open air, or better calculated to avoid the inception or prevent and restrain the ravages of disease, than the hardiness induced by agricultural labors. The farmer is assailed by fewer temptations to vicious indulgence than the laborer in other occupations, and the nature and variety of his engagements, while they are productive of mental quietude and enjoyment, directly tend to teach him to "look through nature up to nature's God." Furnishing suste-

nance and the materials on which their industry is exerted to the manufacturing and commercial classes, he seems to originate every thing, and is in truth as independent of his fellows, as in civilized society it is possible for any individual composing the general aggregate to be.—*N. H. Patriot.*

AGRICULTURAL SCRAPS.

Great Corn Crops.—R. P. Currin, Esq. informs us that he had this year planted in corn, about eighty acres, which will yield on an average fifteen barrels to the acre. One acre produced eighteen barrels, and another fourteen and a half. Mr. B. B. Ford superintended his crop. Who can beat it?

Mr. C. H. Hines of this vicinity, has this year realized from sixteen acres of land, about two hundred barrels of corn, every ear of which was remarkably large and heavy. Old Williamson forever.

W. W. Review.

Fat Shoats.—There were killed in Foster, and brought to our market on Saturday, eight Pigs, fatted on the farm of Mr. Wm. Almy, the aggregate weight of which, when dressed, was 2148 pounds, the largest weighing 337, and the smallest 214 pounds.—*N. Courier.*

Silk.—Timothy Smith, of Amherst in this State, raised the present year about ten pound of reeled Silk for which he obtained a premium of ten dollars, at the Brighton Fair, and five dollars at Northampton. The silk was sent last week to Mr. Barrett of this city, who sold it for fifty-three dollars. The owner has thus realized about seventy dollars for nine pounds and twelve ounces of silk.—*Boston Courier.*

Silk.—In almost every direction we are glad to perceive an increased attention to the subject of cultivating mulberry trees, with a view to the increase of the manufacture of Silk. The subject is every day becoming more familiar to the farmers in the interior, and as a consequence, the desire of adventuring in a business that promises so much advantage is becoming apparent. On this subject the Virginia Herald observes:—*U. S. Gaz.*

"In the vicinity of our town, especially across the river where the soil though thin, is represented from its texture to be peculiarly favorable to the growth of the Mulberry, whose foliage forms the food of the worms, plantations of the tree are about to be established. It is apparent from the soberest calculation that an acre of land applied to this purpose, cannot return to the cultivator a less profit than the same quantity of cotton ground does in the South. And the amount of labor is much less. But it is evident, that, though every farmer may devote a very small portion of his land and labor with advantage to the production of silk, the cheapest and most profitable mode is to conduct the business on an extensive scale, and by associations formed for the purpose."

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BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,.....	bushel.	2 50	—
CATTLE, on the hoof,.....	100lbs.	5 00	6 00
CORN, yellow,.....	bushel.	new	74a76
White,.....	"	do	74a76
COTTON, Virginia,.....	pound.	18½	—
North Carolina,.....	"	—	—
Upland,.....	"	18½	20
FEATHERS,.....	pound.	37	40
FLAXSEED,.....	bushel.	1 25	1 37½
FLOUR&MEAL—Best wh. wh't fam.	barrel.	7 3-4	8 25
Do. do. baker's,.....	"	7½	7½
Do. do. Superfine,....	"	7 00	—
SuperHow. st. in good de'd	"	6 62½	—
" wagon price,.....	"	6 50	—
City Mills, extra,.....	"	6 75	7 00
Do.	"	6 75	—
Susquehanna, firm&scarce	"	6 75	—
Rye,.....	"	5 00	5 25
Kiln-dried Meal, in hhds.	hhd.	19 50	20 00
do. in bbls.	bbl.	4 37	4 50
GRASS SEEDS, red Clover,.....	bushel.	5 00	5 75
Timothy (herds of the north)	"	2 75	3 25
Orchard,.....	"	2 25	3 00
Tall meadow Oat,.....	"	2 00	2 50
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.	—	15 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	8
Hogs, on the hoof,.....	100lb.	7 00	7 50
Slaughtered,.....	"	7 00	7 50
Hops—first sort,.....	pound.	12½	—
second,.....	"	10	—
refuse,.....	"	8	—
LIME,.....	bushel.	33	35
MUSTARD SEED, Domestic,.....	"	5 00	6 00
OATS,.....	"	42	45
PEAS, red eye,.....	bushel.	—	—
Black eye,.....	"	—	1 25
Lady,.....	"	—	—
PLASTER PARIS, in the stone,.....	ton.	—	5 50
Ground,.....	barrel.	1 25	—
PALMA CHRISTA BEAN,.....	bushel.	2 00	—
RAGS,.....	pound.	3	4
RYE,.....	bushel.	88	90
Susquehanna,.....	"	none	—
TOBACCO, crop, common,.....	100 lbs	5 00	5 50
" brown and red,....	"	5 00	7 00
" fine red,.....	"	7 00	9 00
" wrappery, suitable	"	—	—
for segars,.....	"	5 00	10 00
" yellow and red,....	"	6 00	8 00
" good yellow,....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"	4 75	5 00
" ground leaf,....	"	5 00	8 00
Virginia,.....	"	6 00	—
Rappahannock,.....	"	—	—
Kentucky,.....	"	8 00	14 00
WHEAT, white,.....	bushel.	1 40	1 45
Red,.....	"	1 35	1 40
WHISKEY, 1st pf. in bbls.....	gallon.	37	37½
" in hhds,....	"	33½	—
" wagon price,.....	"	30	bbls.
WAGON FREIGHTS, to Pittsburgh,.....	100 lbs	1 50	—
To Wheeling,.....	"	1 75	—
Wool, Prime & Saxon Fleeces,...	pound.	55 to 68	30 to 32
Full Merino,.....	"	48	55 28 30
Three fourths Merino,.....	"	45	48 26 28
One half do,.....	"	40	45 24 26
Common & one fourth Meri.	"	36	40 22 24
Pulled,.....	"	38	40 23 24

RUFFIN ON CALCAREOUS MANURES, SECOND EDITION, just received at this office.

ALSO,

A few pounds of the celebrated SKINLESS OATS, price 50 cents per lb. said to produce 80 bushels per acre.

R. SINCLAIR, jr. Seedsman, connected with this office

oc 13 2t

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.		
BACON, hams, new, Balt. cured....	pound.	11	
Shoulders,.....do.....	"	10	
Middlings,.....do.....	"	8½	9
Assorted, country,.....	"	7	8
BUTTER, printed, in lbs. & half lbs.	"	18½	25
Roll,.....	"	20	
CIDER,.....	barrel.		
CALVES, three to six weeks old....	each.	3 00	6 00
COWS, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 68½	1 75
CHOP RYE,.....	"	1 81	1 87
EGGS,.....	dozen.		
FISH, Shad, No. 1, Susquehanna,.....	barrel.	7 75	
No. 2,.....	"	6 75	
Herrings, salted, No. 1,.....	"	4 00	4 12½
Mackerel, No. 3,.....	"	5 75	
Cod, salted,.....	cwt.	3 00	35 0
LARD,.....	pound.	10	10

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	VIRGINIA.
U. S. Bank,.....par	Farmers Bank of Virginia 1½a
Branch at Baltimore,.....do	Bank of Virginia,.....do
Other Branches,.....do	Branch at Fredericksburg do
MARYLAND.	Petersburg,.....do
Banks in Baltimore,.....par	Norfolk,.....do
Hagerstown,.....½a	Winchester,.....do
Frederick,.....do	Lynchburg,.....do
Westminster,.....do	Danville,.....do
Farmers' Bank of Mary'd, do	Bank of the Valley,.....do
Do. payable at Easton,.....do	Branch at Romney,.....½
Salisbury,.....5 per ct. dis.	Do. Charlestown, do
Cumberland,.....½a	Do. Leesburg,.....do
Millington,.....do	Wheeling Banks,.....1½a2
DISTRICT.	Ohio Banks, generally 2½a3
Washington,.....Banks, 1.	New Jersey Banks gen. 1½a2
Georgetown,.....Banks, 1.	New York City,.....½a3
Alexandria,.....	New York State,.....2½a3
PENNSYLVANIA.	Massachusetts,.....2a2½
Philadelphia,.....½a	Connecticut,.....2a2½
Chambersburg,.....½a	New Hampshire,.....2a2½
Gettysburg,.....do	Maine,.....2a2½
Pittsburg,.....1½a2	Rhode Island,.....2a2½
York,.....½a	North Carolina,.....2½a3
Other Pennsylvania Bks. 1½a2	South Carolina,.....2½a3
Delaware [under \$5]....3a4	Georgia,.....3a3½
Do. [over 5].....½a3	New Orleans,.....4
Michigan Banks,.....5a	
Canadian do.....5a	

WHITE TURKEYS.

A few pair of White Turkeys would be purchased at the Agricultural Repository in Light near Pratt street, by
de 29
ROBERT SINCLAIR JR.
3t.

SAXONY RAMS.

The editor of the Farmer and Gardener has for sale 2 full blooded Saxony RAMS, and 2 ¾ blooded do. These sheep are of a family remarkable for their fine fleece, their wool always commanding the best prices in the market.

ALSO

The bull *Brilliant*, a large sized animal of the Improved Durham Short-horn breed. He is red and white; was got in England, and calved in Frederick county, Md., on the 12th May 1829. His dam was Matchless, got by Favorite, (purchased at the sale of the late R. Colling, a celebrated breeder) son of Favorite, dam by H. Allison's Gray bull, sire Orlando, that died on the passage from Liverpool, out of Rosina, from Yorkshire, that gained the highest prize premium of ten sovereigns at a Cattle show in Manchester, England.
no 3

FOR SALE ON MODERATE TERMS.

THE editor of the Farmer and Gardener has for sale two most beautiful Devonshire Bulls, rising three years of age each, of pure and celebrated blood. Also, one Bull 4 years old, a cross between a full bred Durham bull and a pure Devon cow. This noble animal combines in a remarkable degree the good points of both breeds. To gentlemen of the south who may desire to improve their stocks of cattle, the present is an opportunity rarely to be met with. All letters to the editor upon the subject must be post paid.
de 29

THE SALMAGUNDI,

AND NEWS OF THE DAY.

Embellished with a multitude of Comic Engravings. A new periodical, of a novel character, bearing the above appellation, will be commenced on the beginning of January, 1836. While it will furnish its patrons with the leading features of the news of the day, its principal object will be to serve up a humorous compilation of the numerous lively and pungent sallies which are daily floating along the tide of Literature, and which, for the want of a proper channel for their preservation, are positively lost to the Reading world. Original wits and humorists of our time will here have a medium devoted to the faithful record of the scintillations of their genius. It is not necessary to detail the many attractions which this journal will possess, as the publisher will furnish a specimen number to every person who desires it—(those out of the city, will forward their orders, postage paid)—and he pledges himself that no exertions on his part shall be wanting to make each succeeding number superior in every respect to the preceding ones.

THE SALMAGUNDI will be printed on large imperial paper, equal in size and quality to that which is at present used for the Gentleman's Vade Mecum. It is calculated that MORE THAN 500 ENGRAVINGS will be furnished to the patrons of this Journal in one year—these, in addition to an extensive and choice selection of Satire, Criticisms, Humour, and Wit, to be circulated through its columns, will form a Literary Banquet of a superior and attractive order; and the publisher relies with perfect confidence on the liberality of the American public, and the spirit and tact with which this expensive undertaking will be prosecuted, to bear him successfully and profitably along with it.

The terms of THE SALMAGUNDI will be TWO DOLLARS per annum, payable invariably in advance. No paper will be furnished unless this stipulation is strictly adhered to. Clubs of three will be supplied with the paper for one year, by forwarding a five dollar note, postage paid. Clubs of seven will be supplied for the same term, by forwarding a ten dollar note. The papers that are sent out of the city will be carefully packed in strong envelopes, to prevent their rubbing in the mail.

THE SALMAGUNDI will be published on alternate weeks—otherwise it would be impossible to procure the numerous Embellishments which each number will contain—and the general interest it will afford must be enhanced by this arrangement.

All orders must come postage paid.
Address, CHARLES ALEXANDER, Athenian Buildings, Franklin Place, Philadelphia.
de 29

THE SILK MANUAL.

JUST published and for sale by Sinclair & Moore and Robt. Sinclair, Jr., at the Maryland Agricultural Repository, Light near Pratt street, Baltimore, a complete Manual of the Silk Culture, in which plain instructions are laid down for the culture of the Mulberry, the feeding of the Silk worms, management of the cocoons, reeling, spinning and dyeing of the Silk. In fine, it is a perfect Manual, and comprises every department of the business. The rules are arranged in so plain and methodical a manner that every one can understand them, and by a very few hours attention become master of the business. It is clearly demonstrated in this Manual, that largely upwards of \$500 may be netted from an acre in the Culture; and it is a singular fact connected with the Mulberry as adapted to the making of Silk, that poor dry, sandy, or gravelly land suits it best, the fabric made from worms fed on leaves raised on such soil, being greatly superior in elasticity and richness of gloss to those grown on rich grounds.

Price—per copy, 50 cents.

Liberal discounts made to the trade.

Printed by Sands & Neilson, N. E. corner of Charles and Market streets.

TO AGRICULTURISTS—The analysis of Soils, marls, mineral waters, and other productions, interesting those engaged in Agricultural pursuits, is performed with promptness and accuracy, by

TYSON & FISHER, Chemists,
3t Druggists, No. 192 Market street, Baltimore.

DEVON STOCK.

THE editor of the Farmer and Gardener can at all times supply orders for Devon Cattle. This breed is so distinguished for their easy keep and docility; the richness of the milk of the cows, and for the activity and sprightliness of the oxen, that they would be admirably suited to the purposes of southern agriculturists.

The happy adaptation of the Devonshire Oxen, for the purposes of the farm, will be understood, when it is stated that 4 oxen have been known to plough 2 acres of ground in a day, and a team of them to trot at the rate of six miles an hour with an empty wagon.

Any person wishing to procure them can be supplied by addressing a letter post paid to the editor of the Farmer and Gardener.
nov 10 4t

FOR SALE.

A DURHAM Short-horn bull 15-16 blood. He is from a fine cow and got by Col. Powell's celebrated bull *Monk*—now two years old. Price, delivered at York, Pa., \$130.

Letters addressed to the editor post paid, will be attended to.
nov 10 2t

SEEDS AND TREES.

100 lbs white Italian mulberry Seed
1200 do dark red Onion
400 do early pale red do
500 do large yellow do
400 do early large white silver skin'd do. very superior, and a far more sure crop than any other white variety.
2500 do Cabbages of all the choicest kinds
2250 do Beets do do
450 bushels Peas do do
300 do Beans do do

Also, every other choice variety of Garden Seeds, all the growth of 1835, and venders and others will be supplied at very moderate rates, and a convenient credit.

A very large stock of Grass Seeds of every description, a few pounds of very large Teazel Seed, and all the choice new varieties of Potatoes, &c.

Chinese and Italian mulberry Trees of various sizes by the hundred or thousand. Also a hundred thousand cuttings perfectly prepared for planting.

Priced catalogues, both wholesale and retail, will be sent to every applicant. WM. PRINCE & SONS, Linnæan Garden & Nurseries, Flushing, near New York.
ja 12 3t

FOR SALE,

A HEIFER rising a year old, in calf by Leon, with a pedigree which makes her a 15-16ths bred improved Durham Short horn—she is well grown, and prettily marked.—Enquire of the editor.
no 3

RUFFLE OATS,

For seed, may be had at the Maryland Agricultural Repository, Light street, Baltimore, by application to
Dec. 8 JAMES MOORE.

GRIST MILLS.

The subscriber has for sale at the Maryland Agricultural Repository, a few of those effective Grist Mills, so much approved of by gentlemen who have tried them. They are adapted to horse-power, and with ease will manufacture 3 bushels of grain into the most beautiful lively meal in an hour.
Dec. 8 JAMES MOORE 4t.

STOCK OF IMPROVED SHORT HORN DURHAM.

THE editor of the Farmer and Gardener, Baltimore, has for sale two 7-8 and four 3-4 bred cows, 2 full bred and seven 7-8 bred bulls of the improved short-horn breed. They are all fine animals whether regard be had to their milking or fattening propensities. Their pedigrees are indisputable, all tracing to the British Herd book. They will be sold low for cash, their excellence being considered.—To any person, company, or society, who may want several, a great bargain would be given.

Letters addressed to the editor upon this subject, must be post paid.
nov 10 4t

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 41.

BALTIMORE, MD. FEBRUARY 9, 1836.

Vol. II

THIS publication is the *successor* of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, FEB. 9, 1836.

WORTHY ACTS.

A subscriber to our paper, residing in Tusculum, Alabama, in forwarding his subscription in advance, in a letter dated the 14th ult., inclosed us the names of three new subscribers, which he had procured for us, and the subscription of each in advance.

A few days since, a subscriber in Woodville, Virginia, also sent us three new subscribers, and like our friend in Alabama, sent us the subscription money of each in advance.

These demonstrations of good feeling in our patrons are truly gratifying, and the more especially so, as they were unsolicited on our part; and under such circumstances we should, indeed, be ungrateful were we not to return to these gentlemen our unfeigned thanks, and to assure them that their friendly manifestations towards our establishment, has impressed us with the profoundest and most lasting sentiments of gratitude.

CORN CRUSHER AND GRINDER.

There is perhaps no part of the economy of a farm so badly managed as that of feeding stock; for if we are to judge, in most instances, by the manner in which this duty is performed, we would be led to conclude that to get it done, without any regard to economising the provender, was the great desideratum. In a great majority of cases the horses get their allowance of corn in the ears, the cows in the nubbing, and the corn fed to the fattening hogs is also in the ears; by which process, the *cob*, a most nutritious and valuable part, is mainly lost; for although so far as the horses and hogs are concerned, the *cob*, after a series of years, is converted into manure, yet as an article of food its valuable properties are entirely lost, and lost too, without rendering any *immediate* service to the farm in the form of manure, inasmuch as

from the very nature of its constituent parts, much time must elapse before it can possibly decompose and become food for plants. In husbandry, as in every other avocation of life, it should be the great object of all to effect the most good with the least means. In this, true economy consists. The questions which the farmer should ask himself are,—can the *cob* be converted into food?—is it sufficiently nourishing to justify the expense necessary to reduce it to meal? If he finds these questions can be affirmatively answered, he should no longer hesitate as to the propriety of feeding it in that form. These questions then have been long since so answered. Experiments have been tried, and the cobs crushed into meal have been found to be two-thirds as nutritious as the meal made from the grain. This being the case, any contrivance by which they can be made available to the farmer as food for his stock, must prove a consummation most devoutly to be wished.

We were led into these remarks, on reading the subjoined certificate, which we copy from the *Jonesborough, (Tenn.) Republican*. We of course know nothing about it, more than what we find in the voucher; but if it realizes what is said of it, we think we may say it will prove almost as great a blessing to the South as has the Cotton Gin.

JOURDAN'S CORN CRUSHER AND GRINDER.

We, the subscribers, do certify, that we have seen in operation, and have carefully examined a machine invented by Mr. A. P. Jourdan, of Madisonville, Monroe county, East Tennessee, for crushing and grinding ears, and we have no hesitation in recommending it to the public as a valuable acquisition to the Agricultural community. It breaks the ear in pieces and grinds both *cob* and grain into a meal, well calculated for cattle and horses, and must be attended with a great saving of grain to all who use it. It is simple in its construction, cheap, costing only \$15, and may be worked by hand, by horse, or by water power.—One of the machines may at any time be seen at the farm of Mr. John Hoss, of Washington county. Given under our hands, this 20th day of January, 1836.

PETER MILLER,
JOHN HOSS,
ELIJAH FINE,
DANIEL KENNEY,
JAMES BEARD,
THOS. H. CROUCH,
SAMUEL HUNT,
J. BOYDE.

THE AGRICULTURAL CONVENTION OF VIRGINIA.

We gave in our last a brief account of the meeting and doings of this body; but it was not sufficiently explicit to enable us to comprehend its views—the following abstract, which we copy from the *Richmond Enquirer*, will, however, shew the nature of the propositions which the convention have submitted to the consideration of the legislature, and upon which they ask its sanction. We could wish to see similar institutions engrafted upon the policy of every State in the Union; and we must confess we know of nothing presenting more legitimate claims to the fostering care and patronage of the lawgivers of our several republics.

The expense should not deter a single member of any legislative body from voting for it; for we can promise them that if they will devote forty acres of each pattern farm to the mulberry culture, each of the several States will find itself in the annual receipt of a very handsome revenue from the surplus products of the respective establishments. These are the suggestions alluded to:

First.—The establishment of a professorship of Agriculture at the University of Virginia, connected with a small experimental Farm, to be cultivated by the pupils—a portion of whom, equal to one for each Senatorial District, to be selected by the entire Delegation of the same in both branches of the Legislature, from among such moral and intelligent youths within their respective Districts as are unable to educate themselves.

Second.—The appointment of a Board of Agriculture, consisting of one practical Agriculturist from each Congressional District, whose duty it shall be to meet annually in Richmond, on the same day with the Legislature. They shall receive the same per diem pay, shall sit but one or two weeks, and must report before adjournment, to the Legislature, on all such matters as they may deem worthy of legislative action.

A third plan is, to employ a competent officer, with a salary sufficient to defray necessary expenses, for two years, to make an agricultural survey or minute examination of all the best cultivated parts of the United States, and report to the Legislature in regard to them, every improvement in all the different branches of husbandry, which have been introduced into the States so examined, as well as a minute description of all the most approved agricultural machines and implements, so as to guard the public against the numerous and continual impositions practised upon them in this respect."

THE SILK CULTURE.

The subjoined letter from a highly respectable gentleman of South Carolina, discloses a most important fact connected with the feeding of the Silk worm, a fact by the bye that does not stand alone either in this country or Europe—that two crops of worms can be fed in the same year. This is most important so far as *profit* is concerned, as it will add a hundred per cent. to the pecuniary advantage of the culture.

Chesterfield, Dis., S. C. Jan. 19, 1836.

To the editor of the Farmer & Gardener.

Dear Sir—Accept my thanks for your kindness, in sending me a few numbers of your truly valuable paper. I feel daily more and more convinced of the great necessity of devoting a greater portion of our time and talents, to the improvement so loudly called for in almost every department of our agricultural pursuits—there is perhaps no better mode of making known the results of various experiments, entered into by enterprising citizens, with which our country abounds, than that in which you are engaged, where they are usually collected together and given to the world to stand the test of those who feel a deep interest in their important results. I feel almost ashamed that I have not become a subscriber to your paper before now, but as I had subscribed to several papers, some of which afforded but little information, I concluded to wait until I could drop some of them and substitute those that contain more useful information—please put my name on your list of subscribers, and send me the numbers from the first inst. I am of opinion that I could dispose of probably one dozen of your Silk Manuals, here at present, although I believe the people will not give proper credit to any statements that can be made on the subject of silk, until some actual experiment is made.

I have about 150,000 eggs of the silk worm, which I raised last year, in the following manner: I have been for several years in possession of a few eggs, and raised just about enough annually to keep in seed—last spring about 500 hatched and I kept them all for seed, they produced 75,000 eggs—in about 15 days after the eggs were deposited on the papers, about 500 of them hatched, all of which I saved for seed, which produced me about 75,000 more—the country here abounds with the common native mulberry; although there will be some inconvenience in getting the leaves, I intend giving all diligence, that as fair an experiment may be made as the nature of the case will admit. I have no doubt as to the result myself, if we have a favorable season. You shall be informed of my success in due time. In 1834 I constructed a silk reel after the Piedmont pattern, which answers the purpose remarkably well. I have had several beautiful hanks of silk reeled out of 10 cocoons.

Please send me $\frac{1}{2}$ lb. of the White Mulberry seed, and about \$15 worth of garden seeds of various sorts,

Yours truly,

See that extra attention be paid to your stock of all kinds, and particularly to milch cows.

THE CHINCH-BUG AGAIN.

The desire we expressed for information upon the subject of the above insect, has elicited two communications which follow, the one from Virginia, and the other from the Eastern shore of this state. From the description which both writers give of the *habits* of a bug which some twelve or fifteen years since, ravaged the wheat and corn fields in both of those states, it would seem to be almost identical with the one communicated by our Missouri correspondent, and yet from the color as reported by our subscriber, from Kent county, it is not the same. He describes it as a small "black bug"—those sent us from Missouri, presented to our naked eye the appearance of being what sportsmen in speaking of the color of their dogs denominate *liver colored*; but when placed under a magnifying glass of great power, they put on a greyish hue. Of the odor which they may have possessed we cannot speak advisedly, not having submitted them to the test of our olfactories; but as they were dead when they reached us, it is more than possible that they had been deprived of their peculiar aroma before we received them.

A friend to whom we gave a portion of those sent us, shewed them to one of the most distinguished farmers on the Eastern shore of this state, and he understood him to say, that they were *smaller* and *not so round* as those that had infested the wheat and corn fields of the Eastern Shore.

If it would not be trespassing too much upon the time of the gentleman to whom we allude, we could wish him to favor us with a paper upon the subject. Few, if any, of the numerous enlightened agriculturists of the country, are more able to shed light upon any subject connected with the pursuits of husbandry, and we hope he will feel the subject sufficiently important to induce him to turn for an hour from the affairs of state, to the more peaceful though not less honorable interests of the tillers of the earth.

To our correspondents, who have so promptly responded to our call for information, we return our *thanks*, and hope as they have *broken the ice*, they will often favor us with similar favors. The effusions of their pens will always find a welcome reception, and prompt insertion.

THE CHINCH-BUG.

Mr. Editor—In the last number of the Farmer & Gardener, I perceive one or two communications, accompanied by some remarks on the *Chinch-bug*; and you express a desire for further information respecting this destructive little insect. In various parts of Virginia, it has been well known for ten or twelve years; and I am surprised to learn the happy state of ignorance

which prevails in other states, of its habits, and even existence. At the distance of time I speak of, and for several consecutive years, the *Chinch-bug* committed extensive ravages on our crops—chiefly those of wheat and corn. I have seen whole fields of grain cut short by one half or three-fourths, of what they would otherwise have produced. Until harvest, they mostly confined themselves to the wheat; after which they would invade, in immense armies, the neighboring fields of corn: but they never failed to remain amongst the wheat stubble long enough to destroy the spear grasses, whether natural or artificial, that they might happen to find amongst it. Clover, and all rough-leaved plants were exempt from their depredations.

Various experiments were made to protect our crops from their attacks, but without any success. The farmer was compelled to remain a silent spectator of their advances, indulging in the hope that as they made their appearance suddenly and unexpectedly, they would disappear in a manner no less abrupt. Though they have not yet entirely disappeared, they no longer excite any uneasiness. Occasionally we see a small spot of wheat fading under the attack of a little colony of them; and we also meet with stragglers, more or less numerous in our corn fields.

If I recollect rightly, a great deal was written about the *Chinch-bug* in the American Farmer; and if you will refer to the files of that paper, you will no doubt be able to glean many facts concerning their natural history, which might be interesting now to a portion of your readers. Allow me however to say, that your supposition that the egg is deposited on the *grain*, is entirely erroneous. The insect is short lived; and during the summer, many generations, probably one in every two weeks, are sent forth seeking what they may devour. The favorite receptacle for the eggs, is on the stalk of the Indian corn, beneath the blade; and amongst the fibrous roots of plants. In such situations the young insects are protected from the heat of the sun, until they become of size to roam at large. When the eggs are hatched, the young may be seen in myriads, very minute and of a bright red color. Although the full grown insects have the appendages of wings, yet I believe they make no use of them until they have arrived at that stage of existence, when it is proper they should provide for another generation. They then rise in the air, and are conveyed by the wind aided by such use as they can make of their wings; until they are brought over a field of corn or other place, suitable for their purpose; where they alight, go to work, and after performing their labours, expire. In the winter they shelter themselves under leaves, grass or litter.

I perceive that Gideon B. Smith, in his communication describing the chinch-bug, remarks in conclusion that it has no possible title to the name, any more than it has to that of *June bug*. I am no entomologist; and I think it probable that the same generic description will not embrace the common bed bug and the one in question.—But if that gentleman will take the trouble to introduce the chinch-bug to his olfactories, I venture to say it will vindicate its claim to the title in no ambiguous manner. The odor which it exhales cannot be distinguished by the most deli-

cate perception from that of the insect from which it derives its cognomen. As to the appropriateness of the name, however, I believe it was stated in the American Farmer, that the genus which includes the bed bug contained upwards of one hundred species; and it was asserted at the time that our chinch-bug was one of the family. Amongst the depredators of this latter species, I have sometimes seen insects, which though they did not possess the same specific characters, were yet very nearly allied to it. They bore a considerable resemblance to the bug which is so apt to infest our chambers; and were without the spots which are visible on the chinch-bug.

In conclusion, permit me to solicit a reference to the old volumes of the Farmer, which will no doubt throw some light on the subject; and peradventure furnish an entomological description of the insect, interesting to the naturalist, however unprofitable it may be in a practical point of view.

A FARMER.

Goochland county, Va. Jan. 25, 1836.

CHINCH BUG—SCAB—HESSIAN FLY—SMUT—
THE WEEVIL—DANGER OF SOWING INFECTED
SEED WHEAT—SEED WHEAT, &c.

Kent county, January, 1836.

To the editor of the Farmer and Gardener.

Sir,—In the Farmer & Gardener of the 22d ultimo, in commenting on a letter from Missouri, you disclaim having any knowledge of the chinch bug. An insect of that name has been known in some districts of this county, for fifteen years or more, and has occasionally destroyed portions of our wheat. It is a small black bug, which takes its familiar name from the emission of an odour, similar to that of your "carnivorous belligerent," and may be classed with the granivorous tribe, as the injury sustained by the grain is through the medium of the stem or root, on the sap of which it preys, so as to rob the grain of its necessary sustenance in so great a degree, sometimes, as to make it worthless. This bug makes its appearance in our wheat fields early in June, and of a cloudy day, and morning and evening, may be seen running briskly on the ground through the wheat—it is more frequently found in new grounds, where it takes shelter about old stumps and roots. It is also, occasionally, found in the corn, between the butt of the blade and the stalk. We know of no means of preventing or destroying them. We have also our share of the Scab and Hessian fly, and whatever may be the advantages of washing and soaking seed wheat, I am well convinced, they will not protect it from either of those evils; still I would not decry washing and soaking; those ablutions may destroy smut, but the far safer plan is never to sow wheat from a parcel that has, or ever had, one single grain of smut in it, for we do know, that of all the evils to which this valuable grain is heir to, none is so difficult to eradicate as smut.

With regard to scab, the general opinion here is, that it is occasioned by hard winds and rains, about the time the wheat is blossoming. The Hessian fly, we are of opinion, is a small insect with large wings, resembling somewhat the winged-ant, and may be seen flying about in great numbers of a warm afternoon in the spring and fall. They deposite their eggs on the blade of

the plant, which thence settle down between that and the stalk or stem, where they are nourished through their several changes until they leave it a fly, sometimes in time to transmit its posterity, the same season, in the same field. Those depositories are more frequently made in October and April, hence called the fall or spring fly, as the case may be. To destroy the early spring depositories, some graze down their wheat. In confirmation of those opinions, no difference as it regards fly or scab, has been perceived in the produce of wheat brought from places where there was neither fly or scab, if, of the same kind, and sown at the same time and place, unless occasioned by one being forwarder or later than the other, owing to the place where the seed grew, and from that circumstance, more or less liable, at a particular juncture, to receive injury.

No sir, with us, the doctrines you intimate are exploded, we would as soon believe that "wheat turns to darnel," as that the Hessian fly deposite their eggs in the grain. That there are insects in the grain we know full well—the weevil flies are there hatched, and will grow to considerable size before they leave it. I would here suggest, that they are produced from a fly, which deposite its eggs in the grain, (which it perforates whilst soft) a few weeks before harvest. The best plan we know of to avoid the injury of the weevil fly, is, to thresh out the wheat as early as possible, the slight heat which wheat passes through in bulk, at that period, is sufficient to destroy the insect, then scarcely hatched. This method I have practiced, and am well satisfied is the best, for either seed or flour—should the weevils be very numerous, or forward in growth, the heat may be so great as to destroy the vegetative principle in the grain, with such it is better to part and procure seed elsewhere, for were it left in the straw, a great portion would be destroyed, and although it might do in that case for seed, by sowing much thicker, it would be worth very little for flour.—I have heard of a plan practiced in Pennsylvania, of putting the wheat away in the chaff, in which state its porosity would prevent so much heat being engendered, but of this I have no experience.

With respect to procuring seed wheat from a distance, our experience is that northern wheat is more liable to rust, still more so on late lands, or with a north or west exposure, where the dews are more slowly exhaled. Southern wheat does not stand the winter so well, and is not so soon acclimated, indeed it generally continues to deteriorate, whereas, our northern wheat, particularly the New York flint, in a few years considerably improves, but I fear is now on the wane.—The blue stem in some lands are very productive, but is more liable to smut. The red bearded holds out with us better than any other—but like the blue stem is a favorite with the Hessians, our mortal foes, and which assailed us most dreadfully last year. Do try to discover something that will prevent their ravages—it will entitle you to more praise, and more gratitude among farmers, than he receives who gives name to a city that may rival Washington.

A SUBSCRIBER.

The friends who in our sunshine live,
When winter comes are flown.

COMMUNICATED:

Baltimore, Jan. 22d, 1836.

Mr. Editor—The ship *Everhard*, just arrived here from Bremen, has on board 10,000 bushels of German wheat, which if sold in our market as low as \$1.10 per bushel, will, I am very credibly informed, nett the growers a good profit after paying the freight from Europe here.

Now is not this enough Mr. Editor, to make our agriculturists blush, for their reputation as good farmers, when, instead of our (with the natural fertility and cheapness of our lands) supplying Europe, and the world with breadstuffs, we find that Europe (whose soil is not naturally any better than ours) is absolutely at this time feeding us—and we too a nation of agriculturists—now is it not necessary for us to inquire into the cause of this: is it not evident that Europeans are better farmers than we are? I know not how to account for this, unless it be that they have had more of the spirit of emulation in improving their old worn out lands, whilst our farmers, always alarmed at the idea of associating science and practice in order to improve their worn out lands, are constantly driven from their homes and the homes of their fathers, to the far west in search of a soil which they must believe a quarter of a century's cultivation without any improvement cannot reduce.—When they do find a soil of this description, I say let them emigrate, but if they cannot discover a soil to suit them, let them stay here and follow the plain and simple dictates of nature, and improve their much neglected soil.

A CULTIVATOR OF THE SOIL.

THE GRAPE—NORTON'S VIRGINIA SEEDLING.

To the Editor of the Farmer & Gardener:—

As various opinions have been expressed in regard to this grape, permit me to make a few observations upon it. I was one of those who took it for granted, that the sentence pronounced on it some years ago by Gideon B. Smith, in the American Farmer, was correct; and I probably should not have changed the estimate I had thus formed of it, had I not had an opportunity of seeing the fruit in perfection. As it is, the prejudice I had conceived against it is completely removed; and I am now inclined to the belief that it deserves to stand at the head of the catalogue of American grapes.

The specimen which Gideon B. Smith saw, and on which he founded his remarks, was brought from Pennsylvania; and I suspect there must have been some mistake in supposing it to be identical with Norton's seedling. It is possible however, though not probable, that the character of the grape might have suffered a material change by removal; for we find our other native vines flourish and perfect their fruit without deterioration in a variety of climate and situation. During the past autumn I saw Norton's seedling in perfection; and I now offer the result of my own observation, strengthened by the concurrent testimony of disinterested gentlemen who have cultivated it. In appearance the fruit is very like our common summer grape, except that the clusters are not so much elongated. They are compact like those of the Miller's Burgundy, but larger—weighing from half to three quarters of a pound, and sometimes even a pound. The vine

is perfectly hardy, having withstood the intense cold of last winter without the least injury; it is very prolific; and in the most unfavorable situations, even in wet and swampy land, of which I was a witness, the grapes are matured without a blemish. The berries abound in saccharine matter, are very juicy and of a sprightly and vinous flavor. I have not had the pleasure of drinking the wine made therefrom; but I am informed that it is very excellent and possessed of a fine aroma. In the flourishing vineyards in the vicinity of Richmond, where the Catawba was for many years the favorite; and where in fact no other grape was considered as deserving of extensive culture; the Virginia seedling is now being extensively planted, and will no doubt form the basis of such additional vineyards as may be established, introduced as it has been into those already in the course of successful experiment.

Dr. Norton has stated—and I believe he still insists on the truth of his statement—that his seedling originated from the seed of the *Bland* fertilized by the pollen of the *Burgundy*. In this, however, I am inclined to think he is mistaken. Though he may have taken the utmost pains in planting the seed which were thus artificially impregnated with a view of obtaining a hybrid variety, yet it is well known that a great number of seedling vines, spontaneously grow every spring in gardens where the grape is cultivated. The one in question may therefore be the produce of a plant entirely distinct from those to which he refers its parentage. It is abundantly more hardy than the *Bland*, or *Burgundy*, more prolific, and more long-lived. Indeed all the characteristics of the vine are purely American, and I do not see how any botanist could avoid placing it amongst the varieties of *vitis æstivalis*. But I do not wish to be understood by these remarks as detracting from the merits of the Virginia seedling—on the contrary, the fact of its being a native is an argument in its favour, as we are at once assured that it is exempt from the imbecility which characterises all foreign vines transplanted into our climate.

T. S. P.

Goochland County, Va.

[From the Frankfort Commonwealth.]

ENGLISH CATTLE.

The superiority of the improved Short-horn Durham cattle as a milk breed.

The improved short-horn Durham cattle combine several excellent qualities, which, previous to their introduction, were thought incompatible in the same person. They blend the most attractive colors, and most excellent forms, with a remarkable aptitude to fatten and secrete the richest milk. The excellence of a breed of cattle for milk, does not consist merely in giving a large quantity of milk; they must possess docility of disposition, and such other qualities as will enable the farmer or dairymen to turn them to profitable account after they become barren, or dry, or superannuated. Twenty years ago, the Yorkshire cow was, compared with other breeds, as great a favorite in the London dairy market as at present. She yielded more milk in proportion to the quantity of food consumed, than could be obtained from any other breed, but when the dairy-

man had her four or five years he dried her and sold her. It took a long time to get much flesh on her bones; and when he calculated the expense of bringing her into condition, he found that his cheapest way was to sell her for what she would fetch, and that seldom exceeds £5.

"By degrees, however, some of the more intelligent of the breeders for this market began to find that by cautiously adopting Mr. Berry's principle of selection, by finding out some improved short-horn bull, whose progeny was generally milkers, and crossing the old Yorkshire with him, and then going back to the pure blood—but still regarding the milking properties of the dam, and the usual tendency to possess these qualities in the offspring of the sire—they could at length obtain a breed that had lost little of the grazing properties of the new breed, and retained, almost undiminished, the excellencies of the old breed for the pail. Thence it has happened, that many of the cows in the London dairies are as fine specimens of the improved short-horn as can possibly be produced. They do not, perhaps, yield quite as much milk as the old ones, but what they do yield is of a better quality, and whether the dairyman keeps her a twelve month or a little longer, as soon as he dries her, she fattens most rapidly.

"It is unquestionably true, that every perfection in cattle, whether it be one of form or quality of flesh, or disposition to fatten, or to yield milk—can be promoted and retained solely by the breeder's devoted attention to his particular object.—Some breeders, by devoting their attention solely to the grazing points, have found the milking qualities in their cattle diminished, and hence have been led into an error in supposing the improved breed deficient as to milking properties, an error which arose not from the breed, but from their manner of breeding.

"The author is strictly justified in asserting that improved short-horns, inferior to none for the grazier, may always be selected and bred with the most valuable dairy properties; this also admits of a candid appeal to facts. Perhaps a more plentiful and steady milker than the dam of Mr. Berry's bull, whose portrait has been given, never stood over a pail, and few such carcasses of beef have been exhibited as her, when an accident rendered it necessary only to half feed her. The bull himself has an extraordinary disposition to carry flesh, and his calves are let down in the udders like miniature cows.

"The writer has known many instances of the highest bred short-horns giving upwards of four gallons (wine measure) of milk night and morning; and it is certain that attention only is requisite on the part of the breeder, to perpetuate this quantity to any desirable extent. While on this subject, it is proper to observe, that the excessive quantities of milk obtained from the unimproved short-horns, are seldom or ever obtained from the improved; but a moderately good milker of the latter kind will be found to yield as much butter in a week as the former: the milk being unquestionably of a very superior quality. Within the last three or four years, affidavits were sworn before a magistrate in America, that an improved short horn cow, imported thither, produced after the rate of 20 pounds of butter per week. The assertion at one time, that the Kyloe cow

was superior for milk to the improved short horn, induced the following experiment by a Mr. Watson. He took from his dairy six cows, and obtained the following quantity of butter from a quart of milk of each of them:

No.	Ounces.	Dwts.
1	3	6
2	1	6
3	1	12
4	1	10
5	1	14
6	1	6

or about seven eighths of the weight of butter from the same quantity of milk. Then the increased quantity of milk yielded by the short-horn gave her the decided preference. This experiment also proved that the improved short-horn, improved as a dairy cow as she got older: it also proved that the larger cattle, the breed and other circumstances being equal, yield the greatest quantity of milk.

"Some time after Mr. Walton's experiment, the following observations were made by Mr. Calvert, of Sandsyke, on the quantity of butter yielded by one of his improved short-horn cows. The milk was kept and churned separately from that of the other cows, and the following is the account of the number of pounds of butter obtained in each week; 7, 10, 10, 17, 13, 13, 13, 15, 16, 15, 12, 13, 13, 13, 14, 14, 13, 12, 12, 13, 11, 12, 10, 10, 8, 10, 9, 10, 7, 7, 7. From this it appears that there were churned 373 lbs. of butter in the space of 32 weeks; she gave twenty-eight quarts of milk per day, about midsummer, and would average nearly 20 quarts a day for 20 days.

"After such a record—and it is far from being a singular one, there can be no doubt of the possibility of raising a breed of milking short-horns, which will surpass every variety of cattle in the kingdom. We may perhaps safely add, that we have that breed, and that it only requires a little care in the selection, and in crossing to perpetuate it.

"The number of cows kept for the purpose of supplying London and its environs with milk, is about 12,000. They are, with few exceptions, of the short-horn breed, and almost invariably with a cross of the improved Durham blood.—The universal preference given by such a body of men as the London dairymen is perfectly satisfactory as to their excellence, as to the quantity of milk, the richness of it, and of their aptitude to fatten when dry. An account is given of one which was milked to the 5th of April, then grazed 91 days, and then sold, having made in that time nearly two shillings per day.

"Upon an average, these London dairy cows cost £20; give 8 or 10 quarts of milk, and eat one bushel of refuse brewer's grain, etc. (costing 4d) daily: the clear profit on their milk is about £80, and when nearly dry, they are fattened on grains, oil cake, and cut clover hay, and disposed of at about cost."

Our interesting book might be pursued much further upon this subject, but we must take leave of it, the author having so satisfactorily proven the proposition at the head of the article, viz: The superiority of the improved short-horns as a milk breed. Let the reader think of these facts and statements, and then take them as a standard by

which to estimate the value of the cattle of our own country, or what will be of more importance, let us think of the vast improvement which our cattle admit. In our next number we will consider the superiority of the improved short-horn Durham cattle as to beef.

Locust Hill, Nov. 30, 1835. * * *

THE CAMELLIA JAPONICA.

This beautiful flower is a native of China, the East Indies and the island of Japan. The old Single Red was first introduced into Great Britain less than a century since, and for more than fifty years remained a very rare plant; in the year 1792, the old Double White and Double Striped were introduced, and in 1794 the Double Red. In July 1800, the Double White Japonica was brought into the United States by a gentleman of New York, for Mr. John Stevens of Hoboken, who had previously imported the Single Red.—Soon afterwards it was introduced into New England, as in 1806, a plant of the Double White was in the possession of John Prince, Esq. The flower now became more generally known and admired, and some of the common varieties were introduced into Great Britain, some of the Continental countries, and a few of our States. A great number of seedling varieties have been raised by cross-impregnation; an art now so well understood that there are now in the vicinity of Ghent large houses exclusively devoted to the numerous families of the Camellia. The Camellia will indeed before many years rival the rose in the number of its varieties.

The Camellia will succeed tolerably well in any good, rich soil. A good compost consists of two parts peat, two parts rich maiden loam, from an old pasture, and one part each of leaf soil and sand—the whole of which should be well mixed and turned over several times before using:

N. Y. American.

"The best season for shifting the plants," says Mr. Wilder, in the article in the Gardener's Magazine, to which we have been indebted for the preceding facts, "is turning them out of the pots, carefully pricking with a sharp stick, a little of the soil from the old ball, and repotting them in a pot a size larger than the one from which they were removed; especial care being taken not to injure the young fibres of the roots, and also to give the pots good drainage. There are various methods of increasing the Camellia, such as by seeds, layers, inarching, grafting, budding and cuttings.

"The Camellia may be grown from cuttings, the Single Red and Middlemist being the easiest to strike, and the Double white and Myrtle-leaved the most difficult; but the plants procured in this manner are much more beautiful in their shape, and prolific in their blossoms. As an example, I might mention a Double White, raised about fifteen years since, from a cutting, by the late lamented Dr. Dixwell, of this city, upon which I counted, the last season, more than two hundred, and the present, more than three hundred flower buds. Cuttings may be put in at any season of the year, when the plants are not in a growing state; but the best time is in the autumn, when the young wood is becoming ripe, and should be performed in the following manner:—Cut them

smoothly across at the joint, between the old and new wood, and plant them firmly in pots, well drained, of pure river sand; covering them with bell-glasses, keeping them moderately moist, and placing them in the shade. In from four to six months, they usually commence taking root, at which time they will be materially assisted in their growth by being placed in a mild hot-bed. When it is considered that they have sufficient roots, which will probably be in about one year, they may be repotted, singly, into small pots, giving them the compost used for established plants.

"The Camellia may be easily made to produce seed, but rarely without the aid of artificial impregnation. When it is ripe, which will be in October or November, it should be sown in small pots, placed in the green house and kept moderately moist during the winter. In the spring, the plants will be up, and the following autumn they may be separated, with small balls of earth, and potted in the usual manner."

BROWSING SHEEP.

We are indebted to Wm. Sibley, Esq. of Freedom, for the following communication from a friend in New Hampshire, on the *method and benefit of browsing sheep*. It contains many valuable hints to wool growers, worthy of their attention and practice.—*Belfast Advocate*.

Hopkinton, N. H. Oct. 25.

My Dear Sir—On the return of your uncle I was told you wished to know my method of browsing sheep. * * * * *

As soon as the ground is covered with snow, I browse my sheep daily. I go to the woods and make one or more temporary cribs by placing two poles parallel 18 or 24 inches apart upon two handfuls of brush or billets of wood. Between the poles I place or set my boughs of hemlock or hard pine—(probably spruce, fir, or cedar will do as well)—thrusting the butt ends into the snow and having them lean (all) the same way. I extend my cribs till they will accommodate the number of sheep I wish to feed. I then tread down the snow about the cribs so that sheep can easily pass by those that have reached the browse and are feeding. I then turn my flock to the cribs, and my work is done. In the latter part of the winter, when the snow is sufficiently hard to bear up the sheep, I thrust the boughs, when cut off, into the stiff snow, in rows without poles, but so close together as to prevent the sheep passing through them.

Three winters ago, when I began to browse my sheep, I cut my browse and threw it about at random, but soon found my sheep too nice to feed in that slovenly manner. They would run over it, and leave it. I took the hint of arranging the browse in the way I have mentioned from nature, for I observed where boughs pendant from the trees were sufficiently low to be reached by the sheep, they would go directly to them and feed more freely than in any other way. Sheep are not pleased with having their food touched even by the hand of man.

The advantage of browsing sheep is no longer doubted here. It gives them exercise, fresh air, and green feed during the whole winter. I drive my sheep in flocks of from 50 to 100 nearly a mile every day, unless the weather is very tempe-

stuous, and they heed the cold about as much as the deer or moose that range the White Mountains.

A farmer in this town wintered about 75 sheep wholly on browse and a gill of corn a day to each. His flock were not at the barn during the winter, and they came out of the woods in the spring in fine order. He was fortunate with his lambs that season, and the following fall sold his wethers to the butcher for \$4 a head. I believe he had a slight covering to protect his sheep from storms. I give no grain of any kind to my sheep, except to my lambs the first winter, or to a few old ones that may be feeble; to these I give at the rate of a quart daily to twenty-five. To my breeding ewes I give half a gill a day for three or four weeks before they year. I keep my stalls dry and airy, and daily brush every straw they leave from their cribs. For the last three winters I have wintered 247, 367, and 275, and have lost but two during the three winters. My breeding ewes last winter numbered 127—of which seven proved barren; I had two lambs killed by a fox—two died by taking cold after castration—one from being trod upon when very young, and one came too feeble to live, and died—loss in all, six. I have since disposed of five, and my lambs now number 109; and a more plump, healthy, and beautiful flock I think cannot be found in New England.

I have lately sold 68 of my old sheep, and my whole flock now numbers 211. I have brought up my flock mostly from Merino ewes, and they are now from full blood Saxony to those made nearly so by breeding from the finest Saxony bucks for nine years. My fleeces averaged last June when sheared 2lbs. 6oz., and sold at 75 cts. My store sheep sell from 3 to 10 dollars a head.

Yours to serve,

STEPHEN SIBLEY.

[From the Southern Agriculturist.]

CORN HUSKS FOR BEDS.

"As soon as the husks of Indian corn are fully ripe, they should be gathered when they are dry in a clear air. The outer hard husks are to be rejected, and the softer inner ones to be fully dried in the shade. Cut off the hard end formerly attached to the cob, and draw the husk through a hatchel, or suitably divide it with a coarse comb. The article is then fit to use, and may be put into an entire sack as straw is, or be formed into a mattress, as prepared hair is. Any upholster can do the work. This material is sweet, and durable."

From the bottom of our hearts, how we do wish, that our up-country tavern keepers to a man—yea, to a woman, too, would profit by this hint. Those of our readers who have been near smothering of a hot summer's night in the downy softness of their feather beds, should deem it a duty to circulate the above information. Cold and shivering as we have been of this blustering December day—we are absolutely in a perspiration at the bare recollection of one night spent in Greenville two summers since, with nothing cooler than geese feathers to rest upon—geese feathers in August—Oh ye people of Greenville!—*Ed. So. Ag.*

We learn from an experienced housekeeper, that boiling the husks greatly improves them as a material for mattresses.—*Ed. Cher. Gaz.*

APPLE POMACE.

On a late visit to the town of Marlborough, in Ulster county, we found that the Messrs. Hallocks, very intelligent and extensive farmers, and withal great cider manufacturers, were husbanding their apple pomace with great care, and feeding it to their milch cows. They begin with small feeds of it, and find that it adds greatly to the quantum of milk. The Messrs. Hallocks manufacture their refuse pippins into cider separately, and if the liquor does not retain the peculiar flavor of the fruit, it gives a rich and racy liquor, which commands the first price in market. When we practice making cider from a single species of fruit, and that species affording a rich must, we shall treble or quadruple the value of this product of the farm.

This town of Marlborough, by the bye, has undergone, and is undergoing, important changes in the productiveness of her lands. Thirty years ago, when we first knew it, it was one of the poorest towns in the county; its agricultural products were trivial, and its wood-drawing population had much ado to make their ends and means meet. It now verifies the remark that we have often made, that where nature has done least, industry and skill are the most active, and most successful, in maintaining good habits and good morals—There is no stimulant so salutary as the habit of depending upon one's own exertions. Farmers in fertile districts, like the sons of wealthy parents, seem to be content with the bounties which Providence has allotted to them, without heeding or profiting from the improvements which art or industry are every where making around them.—The common schools of Connecticut, since the state has provided bountifully for their support, are said to be rapidly declining in character, the people lean upon the state—they neglect their own interests and duties, from a reckless hope, that others will perform for them what they can only properly do for themselves. Fifty years ago the fertile flats in several of the towns of Ulster, exhibited patterns of profitable husbandry and of tidy neatness and comfort. But the sons have been living upon the fame of their fathers. Their lands have deteriorated under old exhausting practices—and they have been virtually standing still, while around them, where nature has been less kind, industry and enterprise have been carried into action, and improvement has progressed. Thus while in the once fertile towns, the products and profits of agriculture have been stationary or retrograding, they have been more than quadrupled in the now thriving town of Marlborough. These facts suggest an admonitory lesson to those who are flying to the fertile west in anticipation of all the choice pleasures of life. Our habits, more than the soil we till, influence our happiness; and where incentives are lacking, and we are afraid they will be lacking in the west when the country becomes filled with population, to industry, economy, and the other social virtues, society, we fear, will become lax, and the enjoyments of life be blended with more than an ordinary share of its evils.—*Cultivator.*

Large Ox.—During the present week we had the pleasure of seeing the large Ox owned by Mr. Nathan Slade, of Somerset, which was noticed in this paper some weeks since. He is the largest

and fattest Ox we ever saw—and there is no doubt he would weigh as much as has been estimated, 3,300 lbs. We understood arrangements had been made to drive him to Boston as soon as the road was cleared of ice, which has been the cause of considerable delay.—*Taunton Gazette.*

BOILED FOOD FOR CATTLE.

Having for some years turned my attention to the most economical and profitable mode of fattening cattle, and especially hogs, I have found that preparing their food by the process of boiling is unquestionably the greatest improvement that has yet been discovered—a slight fermentation following previously to feeding it away as certainly adds to the capacity of food for affording nutrition. And I have also further fully ascertained, that the nutritive qualities of many species of food can *only* be obtained by boiling, and in many others is only fully developed, or prepared for the action of the stomach by that process.

The Irish potato furnishes a case in point of the first kind, and the apple of the last. It is extremely rare that you will find a hog that will eat a *raw* Irish potato, but put it through a culinary process, and it is rare to find one that will refuse them.

Boil the apples, let them get cold, and feed them to hogs, and you will double their capacity for producing flesh.

But, sir, the result of fairly conducted experiment has equally convinced me that the mixing of different kinds of food, adds prodigiously to the capacity of the different materials for affording nutrition, from the effect of combination. The increase of the quantity of food, as well as the addition to its nutritive quality, by the simple absorption of water in the act of boiling, is familiar to all well informed persons. But I am assured that the combination of different materials, produces a greater mass of nutritive matter, than the whole could separately yield; and that to find out the art of mixing food, along with the best mode of preparing it for the action of the stomach, is the great art of feeding economically, and I believe to secure animal flesh, health and vigor.

The late improved mode of keeping up in flesh working horses in England, by the admixture of food, may be cited as a corroborating proof in point. It is now I think rendered certain that the combination of two articles of food, produces a new nutritive matter, more effectual than either could separately, or that could be produced from the nutritive matter contained in each fed separately. Boil Irish potatoes, pumpkins and apples; combine them by mashing together, and add a little salt, and it will be found most nutritive food for hogs, producing flesh rapidly. Now a hog fed on Irish potatoes raw, would starve to death, and do little better confined to pumpkins; on raw apples he would live tolerably, on the boiled and combined, he fattens kindly and rapidly.

The result with me has become an anxious desire to ascertain the simplest and most economical mode of steam boiling food on a large scale, say pumpkins, potatoes, &c. Some of your readers may have seen, or be in possession of some plan not generally known, and valuable.

I have no hesitation in saying that the individual whose talents would devise some plan which would come within the reach of every description of planters, uniting economy in the expenditure of capital, with despatch, would confer a solid benefit on our country.

[From the Genesee Farmer.]

HEIGHT OF INDIAN CORN.

I believe that very little is said in agricultural works concerning the height to which corn attains in different parts of our Union. A farmer who has never travelled, nor conversed with travellers on the subject, scarcely knows but what Indian corn is as unvarying in its height as wheat or oats. This, however, is far from being the fact; and corn varies in conforming itself to different latitudes almost to incredibility. In the state of Tennessee, where I was raised, I recollect distinctly of hearing farmers say, that corn, to be good, required to be the height of a rod pole, to the top of the tassel. This I saw tried in Jefferson county, on a fine slope of upland, and the result was, most of the hills tasseled entirely above a 16½ feet pole. This I think is not far from the even height of a good corn field in that country. The mean height to the ears of such corn cannot be far from ten feet, as the ears of all high corn in this country, and especially in Tennessee, rise far above the middle. A farmer of the north, unacquainted with such high corn, would suppose it a difficult task to gather the crop. But farmers soon acquire a slight in bending stalks; 60 ears make a bushel of shelled corn, and the work goes on speedily. In this country, on the 40th degree of latitude, corn is so diminished in its size that it requires 160 ears to make a bushel when shelled. I have paid particular attention to the height of corn in this place, and find it to be from ten to twelve feet, and the ears of all good corn rather more than half that height. Last year, in October, I was invited to measure the height of some ears in a field one mile west of Richmond, in this county. The owner said he had an ear eleven feet high, which excited my curiosity. We prepared a pole and set off for the field a mile distant. Some hundreds of ears were eight feet from the ground, twenty or more nine feet, and one that was upwards of ten. This ear struck straight up, and eleven feet reached to the ear.—My measure was to the joint which produced the ear.

What could be a more appropriate subject for an agricultural museum than specimens of corn from different latitudes? A farmer of the north would be astonished to see one of the giant stalks of Tennessee 14 feet to the ear; while one of that country would be equally amazed to see stalks of the north, only a few feet high, bearing ears. As we approach the south, the time to ripen corn increase with its height. The corn of Tennessee requires 180 days. In this place 140 is barely sufficient, and the farmers always complain with less than 150 days between frosts. Corn brought from four degrees south will not ripen here, but it will attain its full height in 100 days. Any one wishing to try the growth of such corn can have seed gratis by applying to me by mail.

Your's respectfully,

JOHN OSBORN.

Economy, Wayne co., Indiana, Nov. 20, 1835.

WILL WONDERS NEVER CEASE?

We have now at our office the model of a machine for picking cotton out of the boll; and to say the least of it, it is certainly a very ingenious piece of work. It is simple in its construction. A number of wheels abreast, have attached to their rims a number of pendulous oval-shaped pieces of wood, set with card teeth bent upward. These wheels are fixed in front of a cart and moved by the motion of the cart-wheels. The cards dip among the branches of the cotton stalk, seize the cotton, draw it out, and as they descend again in their rotation, pass through a breast or space armed also with straight teeth, which relieves the cards and deposit the cotton on the bottom or plain of the cart, whence it is drawn back by hand with a rake, until the cart is full. To us it seems impossible that the machine can pick a field clean; but suppose it leaves half the bolls untouched, it is still a most valuable discovery, if it pick the other half, as fast as a horse can walk from rows end to rows end. Whether it fall or succeed, it is a machine highly creditable to the ingenuity of Mr. Emmons, the inventor.

Augusta (Geo.) Sentinel.

THE CULTURE OF HOPS.

Iron rods have been lately substituted for hop-poles, in several parts of England, with very remarkable success. Under this system the rapid growth of the vine, particularly after the passing of the thunder clouds, is quite surprising, the plants are perfectly free from mould, rust, the fly, &c.; the crop proves weighty and abundant, exhibits a beautiful color, and ripens much earlier than when trailed in the usual way. The rods should be pointed, in order more effectually to attract the electric fluid, to the agency of which in producing vegetation these results are attributable. From the superior durability of the material the improvement is considered to be also a saving. In England, where whole countries are devoted to the culture, of the hop, this discovery is of immense importance; and is not without its value here.

ON A METHOD OF PREVENTING THE ATTACK OF CATERPILLARS.

At the season of the year, says Mr. Brown of Pinefield, when caterpillars generally attack fruit trees and bushes, the following method of preventing their attacks may not prove undeserving of notice. Let a hole be bored in the stem of a tree as far in as the heart in a direction sloping downwards about a foot from the ground. Into this hole pour a little mercury. Close up the hole with a peg, not very tightly fitted in. Cut the top of the peg smooth with the bark of the tree or bush, and then put a little tar in it to prevent water getting in the hole. This I have found a sure and safe method of not only preventing attacks of caterpillars, but of driving them off the tree; and it is not yet, I believe, publicly known.—*Quar. of Agriculture.*

MODES OF PREPARING FOOD FOR CATTLE, &c.

1. Mix coarse straw and similar coarse materials with about one-third the quantity of hay, sprinkle over it a small quantity of brine, pass the whole through a cutting machine, and feed it out in large

deep troughs, and none of it will be wasted by being trod under foot. A very large quantity may be prepared at a time if found convenient to do so.

2. Fill a large tight box with any desired quantity of chopped cornstalks, with about one twenty-fifth part of their bulk of coarsely ground meal mixed equally through them. Let steam pass into them from a boiler for an hour, and they will then form a most nutritious and palatable food for cattle, especially for milch cows. Or the meal may be boiled with a large quantity of water, and then poured while boiling hot upon the chopped food without steaming. In both cases a small quantity of salt should be sprinkled over them.

Every means of saving hay is of vital importance to the farmer, for it is far more pleasant to be able to sell hay at ten or fifteen dollars a ton, than to purchase it at that price to keep alive a herd of starving cattle.—*Genesee Farmer.*

[From the Tennessee Farmer.]

I see in the 13th No. of the Farmer, descriptions and weights of large Beets. On digging a square for peas, I find some large radishes, one of which is 27 inches in circumference, 15 1-2 in length, and weighs 16 pounds; the top is double, and now, though considerably withered by the late severe frosts, weighs 4 1-2 pounds—total weight 20 1-2. From the top being double, and the shape of the root, a doubt may arise, whether it might not originally have been two plants, but on this supposition, would not the wounds occasioned by the contest before adhesion so retard the growth as to prevent it from attaining such a size.

G. H.

GAMA GRASS SEED.

JUST received, a fresh supply of Gama Grass Seed. This is the grass that bears cutting every 15 days for soiling, and every thirty days for hay, from the middle of May till frost, say till the middle of November, and has yielded at the rate of 64 tons to the acre under peculiarly favorable circumstances, and from an acre of which 30 tons may be calculated upon. The earlier it is sown in the spring the better.

ROBERT SINCLAIR, Jr.

Maryland Agricultural Repository, Light near Pratt street.

feb 9

SHEEP AND CATTLE.

THE Editor of the Farmer and Gardener, Baltimore, is authorised to sell a part of the stock of SHEEP & COWS of John Barney, Esq. so well known as a successful breeder, while he resided at Fort Penn, Del. The Sheep are of the Bakewell breed, and he has been particular to keep up their purity and integrity of constitution, by periodical importations of rams to prevent the evil consequences of breeding in and in. The price is \$50 for rams and \$25 for ewes. Ewes with lambs by their side, deliverable first of April, \$35.

Among the rams there is a most splendid animal, imported by Mr. Barney from England, the sire of many of his yearlings—his price is \$100.

His Cows consist of about 20 in number, and have been bred for their fine dairy qualities. They are large sized and all deep milkers. There are among them 7-8 and 3-4 Durhams, Durhams and Devons, Durhams & Simms' imported breed, and crosses with a favorite French bull imported some years since by the late Stephen Girard, Esq. The price of these cows are \$100 each.

To those who are acquainted with the reputation of Mr. Barney as a breeder and grazier, it is unnecessary to add any thing in favor of his stock; but to those who may be unacquainted with him, it may be proper to observe that his great pride with respect to his sheep, has been to combine weight of carcass with yield of fleece, and that his object with his cows has always been, to breed for size and deep milking, and that thirty years' experience has not been lost upon a gentleman of his close and acute observation.

All letters upon the subject must be post paid.

feb 9

GARDEN & AGRICULTURAL SEEDS.

THE subscriber has just received and is now opening a large and superior assortment of European GARDEN and RARE FIELD SEEDS, growth 1835, and raised by persons of such character that he will expressly warrant the genuine quality of every article put up. Dealers supplied on the most advantageous terms either by the pound or bushel, or neatly put up in papers for retail. Priced lists furnished on application.

Of the endless varieties of Cabbages, Lettuce, Peas, Beans, Cucumbers, &c. none are retained in his catalogue but such as are known to be truly excellent, and such as answer our climate. The most prominent seeds now receiving and in store, are,

25 varieties of PEAS, among which are several new and rare sorts; the most prominent kinds and best bearers are Cromwell early frame, green dwarf Imperial, Knight's tall marrow fat, and Bishop's early dwarf, the latter only attaining the height of 12 inches.

50 varieties BEANS—The English Windsor, long pod, dwarf marrow fat, white cluster, French speckled, Norris tall pole, and Asparagus Beans are preferred sorts.

35 varieties Cabbages, for early and late sowing, for cattle, &c. For culinary purposes I will only name the following superior kinds, viz. Early Dwarf, or Scotch York, Bullock's Heart, Battersea, Flat Dutch and Drum head; and for cattle the large German and Corn Cabbage or *Cæsarian Kale*, the latter affording a great abundance of green fodder at a season when food is scarce, and is worthy the attention of farmers.

12 varieties Cucumbers, early and late sorts, small Gherhires for pickling, and KEENE'S EXTRA LONG GREEN PRICKLY, a superior sort for pickling or common use.

12 varieties Cantaloupe and Water Melons.

12 varieties of RADISH. The finest kinds are the early red Turnip Radish, Mason's short top scarlet and yellow Turnip Radish, the two last named are superior sorts, particularly the latter, which is unrivalled and well suited for spring, summer or fall sowing.

10 varieties Turnips; for table use the large WHITE flat, raised at our seed garden, still retains a decided preference over all imported sorts for early or general fall sowing; the long yellow or carrot shaped is also a desirable kind for spring use or standing out during the winter. The Ruta Baga and Large yellow Bullock are preferred for cattle.

ALSO,

BEET seed, several sorts; Carrot, early and late, and large do. for stock; Cauliflower, Broccoli, Celery, Cress, Pepper, Salsafy or *vegetable oyster*, Squash, common sorts, and several fine new kinds; Rhubarb for pies and tarts: this fine vegetable, too much neglected in this country, is sold in immense quantities at the London markets and is esteemed as one of the most important and useful vegetables.

FIELD SEEDS.

English Ray or Rye Grass, St. Foin, Burnet for sheep pasture; Scarlet Trefoil or *Trifolium incarnatum*, Yellow Trefoil, Green Sward or Lawn Grass, Gama Grass seed, Millet, Hemp, Lucerne, white French Clover, Oats, several imported kinds, weighing 44lb. per bushel, early Potatoes, best English and American, Mangold Wurzel, large Altringham Carrot, &c. Also sweet scented Vernal Grass, and Italian Rye Grass.

I will also have in store in a few days 250 select varieties FLOWER SEEDS: great care has been taken to select only such as are desirable.

ROBERT SINCLAIR, Jr.

Light, 3 doors N. of Pratt street, Baltimore.

feb 9

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CONTENTS OF THIS NUMBER.

Worthy acts—Corn Crusher and Grinder—objects of the Agricultural Convention of Virginia—the Silk Culture, in South Carolina, two crops in one season—editorial remarks and communications on the chinch-bug—the Scab, Hessian fly, smut, weevil, danger of sowing infected seed wheat, seed wheat, &c.—Notice of Norton's seedling—superiority of the improved Durham short horn Cattle as a milk breed—Notice of the Camellia Japonica and the manner of treating them—mode of browsing sheep—corn husks valuable for beds and mattresses—virtue of apple pomace as food for milch-cows, pippins good as a cider fruit, and the pernicious effects of bad husbandry—large Ox—superiority of boiled food for cattle—height of Indian corn—machine for picking cotton—new method of cultivating hops—on the method of preventing the attacks of caterpillars—mode of preparing food for cattle—large vegetables—advertisements—prices current.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM.	TO.
BEANS, white field,.....	bushel.	2 50	
CATTLE, on the hoof,.....	100lbs.	5 00	6 00
CORN, yellow,.....	bushel.	new 76a78	
White,.....	"	do 76a78	
COTTON, Virginia,.....	pound.	18½	
North Carolina,.....	"		
Upland,.....	"	18½	20
FEATHERS,.....	pound.	37	40
FLAXSEED,.....	bushel.	1 25	1 37½
FLOUR & MEAL—Best wh. wh't fam.	barrel.	7 34	8 25
Do. do. baker's,.....	"	7½	7½
Do. do. Superfine,.....	"	7 00	
SuperHow. st. in good de'd	"	6 62½	
" wagon price,.....	"	6 50	
City Mills, extra,.....	"	6 75	7 00
Do. do. Superfine,.....	"	6 75	
Susquehanna, firm & scarce	"	6 75	
Rye,.....	"	5 00	5 25
Kiln-dried Meal, in hhds.	hhd.	19 50	20 00
do. in bbls.	bbl.	4 37	4 50
GRASS SEEDS, red Clover,.....	bushel.	5 00	5 75
Timothy (herds of the north)	"	2 75	3 25
Orchard,.....	"	2 25	3 00
Tall meadow Oat,.....	"	2 00	2 50
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.		15 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	8
HOGS, on the hoof,.....	100lb.	7 00	7 50
Slaughtered,.....	"	7 00	7 50
HOPS—first sort,.....	pound.	12½	
second,.....	"	10	
refuse,.....	"	8	
LIME,.....	bushel.	33	35
MUSTARD SEED, Domestic,.....	"	5 00	6 00
OATS,.....	"	42	45
PEAS, red eye,.....	bushel.		1 25
Black eye,.....	"		
Lady,.....	"		
PLASTER PARIS, in the stone,.....	ton.		5 50
Ground,.....	barrel.	1 25	
PALMA CHRISTA BEAN,.....	bushel.	2 00	
RAGS,.....	pound.	3	4
RYE,.....	bushel.	88	90
Susquehanna,.....	"	none	
TOBACCO, crop, common,.....	100 lbs	5 00	5 50
" brown and red,.....	"	5 00	7 00
" fine red,.....	"	7 00	9 00
" wrappry, suitable	"		
for segars,.....	"	5 00	10 00
" yellow and red,.....	"	6 00	8 00
" good yellow,.....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality,.....	"	4 75	5 00
" ground leaf,.....	"	5 00	8 00
Virginia,.....	"	6 00	
Rappahannock,.....	"		
Kentucky,.....	"	8 00	14 00
WHEAT, white,.....	bushel.	1 40	1 45
Red,.....	"	1 35	1 40
WHISKEY, 1st pf. in bbls.	gallon.	37	37½
" in hhds.	"	33½	
" wagon price,.....	"	30	bbls.
WAGON FREIGHTS, to Pittsburgh,.....	100 lbs	1 50	
To Wheeling,.....	"	1 75	
WOOL, Prime & Saxon Fleeces,.....	pound.	55 to 68	30 to 32
Full Merino,.....	"	48 55	28 30
Three fourths Merino,.....	"	45 48	26 28
One half do.	"	40 45	24 26
Common & one fourth Meri.	"	36 40	22 24
Pulled,.....	"	38 40	23 24

FOR SALE ON MODERATE TERMS.

THE editor of the Farmer and Gardener has for sale two most beautiful Devonshire Bulls, rising three years of age each, of pure and celebrated blood. Also, one Bull 4 years old, a cross between a full bred Durham bull and a pure Devon cow. This noble animal combines in a remarkable degree the good points of both breeds. To gentlemen of the south who may desire to improve their stocks of cattle, the present is an opportunity rarely to be met with. All letters to the editor upon the subject must be post paid.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.		
BACON, hams, new, Balt. cured	pound.	11	
Shoulders,..... do.	"	10	
Middlings,..... do.	"	8½	9
Assorted, country,.....	"	7	8
BUTTER, printed, in lbs. & half lbs.	"	18½	25
Roll,.....	"	20	
CIDER,.....	barrel.		
CALVES, three to six weeks old,.....	each.	3 00	6 00
COWS, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 68	1 75
CHOP RYE,.....	"	1 81	1 87
EGGS,.....	dozen.		
FISH, Shad, No. 1, Susquehanna,	barrel.	7 75	
No. 2,.....	"	6 75	
Herrings, salted, No. 1,.....	"	4 00	4 12½
Mackerel, No. 3,.....	"	5 75	
Cod, salted,.....	cwt.	3 00	35 0
LARD,.....	pound.	10	10

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	PER.	FROM.	TO.
U. S. Bank,.....	par		
Branch at Baltimore,.....	do		
Other Branches,.....	do		
MARYLAND.			
Banks in Baltimore,.....	par		
Hagerstown,.....	3a		
Frederick,.....	do		
Westminster,.....	do		
Farmers' Bank of Mary'd, do	do		
Do. payable at Easton,.....	do		
Salisbury,..... 5 per ct. dis.	do		
Cumberland,.....	3a		
Millington,.....	do		
DISTRICT.			
Washington,.....	do		
Georgetown,.....	Banks, 1.		
Alexandria,.....	do		
PENNSYLVANIA.			
Philadelphia,.....	1a		
Chambersburg,.....	2a		
Gettysburg,.....	do		
Pittsburg,.....	1a2		
York,.....	1a		
Other Pennsylvania Bks. 1a2	do		
Delaware [under \$5].....	3a4		
Do. [over 5].....	2a½		
Michigan Banks,.....	5a		
Canadian do.	5a		
VIRGINIA.			
Farmers Bank of Virginia 2a½	do		
Bank of Virginia,.....	do		
Branch at Fredericksburg, do	do		
Petersburg,.....	do		
Norfolk,.....	do		
Winchester,.....	do		
Lynchburg,.....	do		
Danville,.....	do		
Bank of the Valley,.....	do		
Branch at Romney,.....	3		
Do. Charlestown,.....	do		
Do. Leesburg,.....	do		
Wheeling Banks,.....	1a2		
Ohio Banks, generally 2½a3	do		
New Jersey Banks gen. 1a2	do		
New York City,.....	1a		
New York State,.....	2½a3		
Massachusetts,.....	2a2½		
Connecticut,.....	2a2½		
New Hampshire,.....	2a2½		
Maine,.....	2a2½		
Rhode Island,.....	2a2½		
North Carolina,.....	2½a3		
South Carolina,.....	2½a3		
Georgia,.....	3a3½		
New Orleans,.....	4		

WHITE TURKEYS.

A few pair of White Turkeys would be purchased at the Agricultural Repository in Light near Pratt street, by de 29 ROBERT SINCLAIR Jr. 3t.

SAXONY RAMS.

The editor of the Farmer and Gardener has for sale 2 full blooded Saxony RAMS, and 2 ¾ blooded do. These sheep are of a family remarkable for their fine fleece, their wool always commanding the best prices in the market.

ALSO

The bull *Brilliant*, a large sized animal of the Improved Durham Short-horn breed. He is red and white; was got in England, and calved in Frederick county, Md., on the 12th May 1829. His dam was Matchless, got by Favorite, (purchased at the sale of the late R. Colling, a celebrated breeder) son of Favorite, dam by H. Allison's Gray bull, sire Orlando, that died on the passage from Liverpool, out of Rosina, from Yorkshire, that gained the highest prize premium of ten sovereigns at a Cattle show in Manchester, England.

no 3

TO AGRICULTURISTS—The analysis of Soils, mars, mineral waters, and other productions, interesting those engaged in Agricultural pursuits, is performed with promptness and accuracy, by

TYSON & FISHER, Chemists,
3t Druggists, No. 192 Market street, Baltimore.

DEVON STOCK.

THE editor of the Farmer and Gardener can at all times supply orders for *Devon Cattle*. This breed is so distinguished for their easy keep and docility; the richness of the milk of the cows, and for the activity and sprightliness of the oxen, that they would be admirably suited to the purposes of southern agriculturists.

The happy adaptation of the *Devonshire Oxen*, for the purposes of the farm, will be understood, when it is stated that 4 oxen have been known to plough 2 acres of ground in a day, and a team of them to trot at the rate of six miles an hour with an empty wagon.

Any person wishing to procure them can be supplied by addressing a letter post paid to the editor of the Farmer and Gardener. nov 10 4t

FOR SALE.

A DURHAM Short-horn bull 15-16 blood. He is from a fine cow and got by Col. *Powel's* celebrated bull *Monk*—now two years old. Price, delivered at York, Pa., \$130.

Letters addressed to the editor post paid, will be attended to. nov 10 2t

SEEDS AND TREES.

100 lbs white Italian mulberry Seed
1200 do dark red Onion
400 do early pale red do
500 do large yellow do
400 do early large white silver skin'd do. very superior, and a far more sure crop than any other white variety.
2500 do Cabbages of all the choicest kinds
2250 do Beets do do
450 bushels Peas do do
300 do Beans do do

Also, every other choice variety of Garden Seeds, all the growth of 1835, and venders and others will be supplied at very moderate rates, and a convenient credit.

A very large stock of Grass Seeds of every description, a few pounds of very large Teazel Seed, and all the choice new varieties of Potatoes, &c.

Chinese and Italian mulberry Trees of various sizes by the hundred or thousand. Also a hundred thousand cuttings perfectly prepared for planting.

Priced catalogues, both wholesale and retail, will be sent to every applicant. WM. PRINCE & SONS, Linnæan Garden & Nurseries, Flushing, near New York. ja 12 3t

FOR SALE,

A HEIFER rising a year old, in calf by Leon, with a pedigree which makes her a 15-16ths bred improved Durham Short horn—she is well grown, and prettily marked.—Enquire of the editor. no 3

RUFFLE OATS,

For seed, may be had at the Maryland Agricultural Repository, Light street, Baltimore, by application to Dec. 8 JAMES MOORE.

GRIST MILLS.

THE subscriber has for sale at the Maryland Agricultural Repository, a few of those effective Grist Mills, so much approved of by gentlemen who have tried them. They are adapted to horse-power, and with ease will manufacture 3 bushels of grain into the most beautiful lively meal in an hour.

JAMES MOORE.

Dec. 8. 4t.

STOCK OF IMPROVED SHORT HORN DURHAM.

THE editor of the Farmer and Gardener, Baltimore, has for sale two 7-8 and four 3-4 bred cows, 2 full bred and seven 7-8 bred bulls of the improved short-horn breed. They are all fine animals whether regard be had to their milking or fattening propensities. Their pedigrees are indisputable, all tracing to the *British Herd book*. They will be sold low for cash, their excellence being considered.—To any person, company, or society, who may want several, a great bargain would be given.

Letters addressed to the editor upon this subject, must be post paid. nov 10 4t

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 42.

BALTIMORE, MD. FEBRUARY 16, 1836.

Vol. II

THIS publication is the *successor* of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, FEB. 16, 1836.

We will cheerfully comply with the request of our correspondent at Allen's Fresh, by republishing the letter of the late R. K. Meade, Esquire, next week. We would have given it in the present number, but that our columns were previously occupied with the proceedings of the agricultural convention of Virginia.

We lay before our readers to-day the *memorial* addressed by the *Agricultural Convention* recently held in Virginia, to the Legislature of that ancient commonwealth. It is a frank and manly *expose* of the present condition and prospects of those engaged in the pursuits of husbandry, and lays bare, to the very bone, the causes which have led to the untoward state of things that now exists. It is descriptive of the situation of affairs in Virginia, it may be said: it is so; but the picture would be equally faithful if sketched for almost any of the old states, and especially those of the middle and southern division. We bespeak for this memorial the attentive perusal of each and all of our readers: we ask them not only to read but *digest* the specification of causes which have proved so disastrous to the general interests of agriculture, and after having digested them, we would make this request, that they should come to the determination, so far as they are concerned, of discountenancing by precept and example every practice tending in the least to impair the happiness and prosperity of their respective states. There can be no question as to the truth of the position, that whatever affects the welfare of the husbandman, strikes at that of all other classes in society. However elevated other pursuits may be, still that of agriculture, must forever stand as the acknowledged basis of all others; for that which provides the means of human subsistence,—without which the necessities and comforts of life could not be produced,—must

be esteemed as the foundation on which all others rest for support. But this advantage of position will prove of no value if the cultivators of the earth do not avail themselves of it. If they remain inactive—if they throw their energies away—if they sit still, and Sampson-like, suffer themselves to be shorn of their strength, their fall will be as certain as that it will be unwept and unhonored. But if they do as they should—if they do as interest, duty, and patriotism, demand—if they rise in the majesty of their strength, and shake off the lethargy that has, like an Incubus, chained down their faculties of mind and body; if they speak out and demand of the several representative bodies such grants as are required by their peculiar situation—if they act in concert, and waste not their force in internal dissensions, there can be no question that all they may ask will be conceded to them. What are the interests of agriculturists, but the interests of the whole community? They are the same, identical in their every phase; in all their bearings and effects. Can it be presumed then that any thing which they may ask for, predicated on their wants and necessities, will be denied? No, not for a moment. Commerce and manufactures we admit are essential handmaids to agriculture; but without the latter what would they be; it gives employment—lucrative employment to both: gives value to labor by the employment of it, and by providing the means to render its employment by other classes necessary; it rewards industry and stimulates enterprise by giving occupation to the one, and opening a field for the exercise of the other. But with all these strong and paramount claims to support—with all these pre-eminent pretensions to distinction, if they do not exert them for *weal*, they will prove rather so many curses than blessings. What does it avail the man born to a princely estate, after he has squandered his patrimony away, that he was born in affluence? Nothing. Nor will it avail agriculturists any thing, that their relative position in society placed them in the first rank, if they do not use that position for the promotion of their own welfare.

In most of the old states, an improvident system of husbandry—in many cases a total neglect of all the principles of enlightened culture—and a

too rigid adherence to mistaken ancestral notions of farming, have so impoverished the soil that it has long since ceased to offer by its yields any inducement for its culture. To bring this exhausted soil to at least its original fertility, to enlighten the minds of the youth by introducing a system of agriculture founded on scientific principles, applicable to the particular condition of things as they now stand, to elevate the calling of those engaged in this the first of all avocations, and to give life and spirit, and to infuse a feeling of just pride into their minds, are among the objects sought to be effected by the patriotic body whose proceedings we are speaking of; and if we have not permitted our wishes to interfere with the exercise of our judgment, we would say that it appears to us as obvious as any thing yet in the womb of futurity can be, that the movement of this Virginia agricultural convention, will produce in our country, a revolution in the affairs of agriculture, no less salutary in its effects than it will be astonishing in its results; and for the honor and prosperity of our common country, we do sincerely hope that the example they have set will be followed by every other state in the Union, where such action may be required by the necessities of the people.

The *Monroe Democrat*, published at Rochester, New York, recently contained an account of a *Sewing Machine*, invented by a mechanic of that place, from which we make the following extract.

"We were yesterday permitted to witness the operation of a very simple machine, which has been constructed within a few months in this city, and which demonstrates the fact that tailoring will not always be done by fingers and thimbles. In its present imperfect state, it takes from three to four stitches in a second, and the inventor thinks one may be constructed with improvements which have suggested themselves to his mind, which will more than double this number."

Discovery of importance.—We noticed some days since the discovery made by Mr. Peter Ritter, brother of the present governor of Pennsylvania, of melting iron with bituminous coal. At his furnace in Crawford county, he can make 120 tons a week, and the samples according to the *Miners' Journal*; (Pottsville,) are of the first quality.

IMPORTED HORSES.

We have been furnished with the following list of Horses recently imported from England in the Caledonia Brander, by Dr. A. T. B. Meritt, of Greenville. We understand that, notwithstanding a tempestuous voyage, they were all landed in fine order and condition. This importation will be a valuable addition to our stock, and increases the obligations of the friends of the Turf to Dr. Meritt and the gentlemen with whom he has been associated for their enterprise in endeavoring to improve the breed of this noble animal.—*Petersburg Intelligencer*.

A LIST OF THE HORSES RECENTLY IMPORTED BY DR. MERITT.

Rowton, a chesnut, foaled in 1826, got by Oiscaw, dam Katherine by Woful, out of Perspective by Rubens, &c. winner of the St. Leger in 1829, (97 subscribers) and all his races at three, four and five years old, except one, &c. A horse five feet two inches high, of great length and power, and most exquisite beauty. He covered at 21 guineas in England.

Felt, a dark bay, foaled in 1826, got by Langar out of Steam, sister to Starch by Waxy, Pope, &c. winner of the Liverpool cup in 1830, (59 subscribers) and many other cups and prizes, and considered a capital runner. He is 5 feet 3 inches high, of great substance and power, and fine action.

Shakspeare, got by Smolensko out of Charming Molly, by Rubens, &c., ran second for the Derby, which he lost, by bad riding, winner of the Gold Cup at Northampton, and other prizes. He is a large bay horse, 5 feet 4 inches high, good action, and grand and magnificent form.

Merman, foaled in 1826, got by Whalebone out of Mermaid, by Orville, &c. He was a very fine runner, and was one of the best four mile horses of the day. He is a large brown horse, nearly 5 feet 4 inches high, very strong, and of very fine form and action.

Margrave, a very rich chesnut, got by Mulsey out of Princessa's dam by Election, &c., winner of the Criterion Stakes at New Market, (36 subscribers) the Great St. Leger in 1832 (73 subscribers) the Gascoigne Stakes at Doncaster, the Grand Duke Michael Stakes at New Market, and other prizes. He is a very large horse, 5 feet 4 inches high, of good action, well proportioned and uncommonly strong.

Flexible, a fine bay, got by Whalebone out of Themis, sister to Icantator by Sorcerer, &c. He is 5 feet 2 inches high, of good proportions, active and strong. He was a very fine runner, won 9 times (including a Gold Cup, 4 miles, 12 subscribers) at 3 years old, and other prizes afterwards.

Primula, a large well formed bay mare, foaled in 1827, got by Cervantes out of Cowslip, (the dam of Brontes, Comedy, Primrose, &c.) by Cockfighter, &c., covered by Shakspeare.

Pera, a bay mare, 5 feet 2 inches high, long and well proportioned, was foaled in 1826, and is own sister to Mahmoud, Galata, the winner of the Oaks, &c. being by Sultan out of Advance, by Pioneer, &c., covered by Defence, Imported by Mr. Robert C. Williams.

Water Witch, a bay mare, nearly 5 feet 2 inches

high, good length and great symmetry and beauty, foaled in 1828, got by Whalebone out of Niobe by Sir David, &c. Imported for Edmund F. Wickham, Esq. Covered by Buzzard, a son of Blacklock.

Bashful, a bay filly, 4 years old, got by St. Patrick, winner of the St. Leger, out of Spavine by Orville, &c. 5 feet 2 inches high, &c. Not covered.

A bay yearling filly, by Longwaist, out of Brown Duchess, by Orville, &c.

A chesnut yearling filly, by Velocipede, out of a Walton mare, &c.

My Lady, by Comus, out of the Colonel's dam, a large strong bay mare, covered by Langar. Imported by Francis P. Corbin, Esq.

A brown yearling filly by Bustard, out of Camellina, sister to Camel, &c. Imported by Mr. Corbin.

ANCIENT MEXICAN COTTON MANUFACTURE.

The Cotton Manufacture was found existing in considerable perfection in America on the discovery of that continent by the Spaniards.—Cotton formed the principal article of clothing among the Mexicans, as they had neither wool, hemp, nor silk; nor did they use the flax, which they possessed for purposes of clothing; and their only materials for making cloth, besides cotton, were feathers, the wool of rabbits and hares, (known in commerce as coney's wool) and the fibrous plants called the *maguel*. We are informed by the Abbe Clavigero, that "of cotton the Mexicans made large webs, and as delicate and fine as those of Holland, which were with much reason highly esteemed in Europe. They wove their cloths in different figures and colors, representing different animals and flowers of feathers interwoven in cotton, they made mantles and bed curtains, carpets, and other things, not less great than beautiful. With cotton also they interwove the finest hair of the belly of rabbits and hares, after having made and spun it into thread; of this they made the most beautiful cloths, and in particular, winter waistcoats for the lords."—Among the presents sent by Cortes, the conqueror of Mexico, to Charles V., were "cotton mantles, some all white, others mixed with white and black, or red, green, yellow and blue; waistcoats, handkerchiefs, counterpanes, tapestries, and carpets of cotton;" and "the colors of the cotton were extremely fine," as the Mexicans had both indigo and cochineal among their native dyes.—They also used cotton in making a species of paper; one of their kind of money consisted in small cloths and cotton; and their warriors wore cuirasses of cotton; covering the body from the neck to the waist.—*Baine's History of Cotton Manufacture*.

FENCE POSTS.

An excellent method of rendering these durable in the ground, is published in the American Eagle. It consists, 1. In peeling the posts, and in sawing and splitting them if too large; 2. In sticking them up, under cover, at least one entire summer; and 3. In coating with hot tar, about three feet of the butt ends, which are to be inserted in the ground—after which they are ready

for use. We have no doubt the advantages of this mode of preparation will more than remunerate for labor and expense. Our reasons for this belief are briefly as follows: The sap of all non-resinous trees, will ferment in the presence of heat and moisture, and cause the decay of the wood. To prevent this natural consequence, the first object should be, when a tree is felled to expel sap from the pores of the wood. This is done by peeling, splitting, sawing, or hewing, and exposing the wood to the drying influence of the sun, or at least the air. The process is facilitated too by immersing the wood in water for a time, which liquifies the sap, and favors its expulsion. And when the moisture has been expelled, the next object is to keep it out, by paint, tar or charring. In the mode recommended above, the moisture is expelled by the peeling, sawing and summer drying, and its return is prevented by the coating of tar. The retention of the bark upon the timber is particularly prejudicial, not only in preventing evaporation, but affording shelter to various species of the borer, which, under its cover, carry on its depredations upon the timber. We have seen pine logs nearly destroyed in a summer by worms, where the bark had been left on, while those which had been peeled remained uninjured. The best timber is obtained from trees which have stood a summer, or a year, after they have been girdled and peeled.—*Cultivator*.

We are told by a sensible and experienced planter that a log or post which has never been split or hewn will last much longer when exposed to the weather than one that has. The splitting or hewing divides the hard rings of wood called the *grain*, and lets in the water, which causes the timber to rot. On that account the ends of a round log of wood exposed to the weather are the first parts to rot.—*Ed. Ch. Gaz.*

RICE GRASS.—The Charleston (Southern Agriculturist) says:—"We have recently seen hay made of this valuable grass in the neighborhood of this city, which was cured with great ease; it was eaten with great avidity by cattle, and was pronounced by good judges equal to the best Timothy imported from the North. We feel confident it is the most valuable grass for hay, that is produced in our southern country. The time for collecting the seed this year was from the 1st to the 15th October. An enterprising and successful planter of our acquaintance had three bushels of the seed of this grass collected by a servant in a short time, at intervals, amounting to not more than a day, within two miles of our city; he intends to make a fair experiment in cultivating it on his plantation for the Charleston market. We wish him success.

Geological Survey of New York.—Mr. Clinch brought into the assembly of New York, January 22d, a bill appropriating \$26,000 annually for four years, to make an accurate and complete geological survey of that state, which shall be accompanied with proper maps and diagrams, and furnish a full and scientific description of its rocks, soils and minerals, and of its botanical and zoological productions, together with specimens of the same.

[From the Farmer's Register.]

VIRGINIA AGRICULTURAL CONVENTION.

This body met on the day appointed, and in the manner proposed in the last previous numbers of this journal. Delegations were present from only two agricultural societies, those of Albemarle and Fredericksburg, and from two popular meetings, the one in Albemarle, and the other of James city and York counties. But however desirable were such appointments, as evidences of interest felt for the objects in view, by entire bodies or portions of the community, the plan of the convention as previously proposed, and repeatedly notified to the public, embraced every person belonging to the agricultural interest, whose zeal for the cause should induce his attendance and participation in the proceedings. The juncture was peculiarly favorable for the assemblage being large, and composed of agriculturists from every part of the commonwealth. In addition to the session of the legislature, and the other usual causes which draw persons from all parts of the state at this season, there were members of three other conventions, besides the agricultural, which served to add to the latter, both in numbers and talents, from remote parts of the state. The proceedings of the Agricultural Convention attracted much attention. The last session was numerously attended, and the proceedings were listened to with apparent interest—and though the memorial was not read until at the close of a sitting of three hours, there remained present at the late hour of 10 o'clock from one hundred and fifty to two hundred persons, when the final, and unanimous, vote of adoption was taken. All persons present had been informed that their participation was invited, and that unless dissent was expressed, all present were considered as members of the convention. If the object of the meeting should be in any measure gained, by obtaining legislative enactments in aid of agriculture, it will be a novelty in the policy and usual procedure of Virginia, that will greatly surprise as well as gratify those who have most zealously urged and aided this effort. But however feeble may be the hopes entertained for legislative action, there is better reason now for their being kept alive, than merely the respectable character of the late convention, and its wishes, alone would authorize. This reason is, that it is become apparent to every thinking man, that the agricultural and general interests of Virginia are in the *utmost need* of all the support that her government and her people can give. That *something must be done for relief*, seems to be the opinion entertained by every one—unless our legislature is to present an all-important exception. If this should be the case indeed, the legislative history of Virginia will present a parallel case to the closing scenes of the Greek Empire—when the people, and their rulers, seemingly forgetful that the Turks were thundering at their gates, were divided into implacable opposing factions, and engaged in disputing on metaphysical subtleties, or religious differences, of which nobody could understand the meaning.

The journal of the convention, and the memorial adopted, are given below. The address of the President of the convention, (which was delivered at the request of the general committee in

their meeting of the previous day,) we hope to obtain a sketch of for future publication.—*Ed. Farmers' Reg.*

PROCEEDINGS OF THE AGRICULTURAL CONVENTION.

At a convention of delegates from the Agricultural Societies of Albemarle and Fredericksburg, and from public meetings in the counties of Albemarle and James City, and also a number of other individuals belonging to the agricultural interests of Virginia—held in the Senate Chamber in the city of Richmond, January 11th, 1836,

On motion of Mr. Craven, of Albemarle, James Barbour of Orange, was chosen President of the Convention.

On motion of Mr. Richardson of James City, Edmund Ruffin of Petersburg, was chosen Secretary.

On motion of Mr. Cabell of Nelson,

Resolved, That a committee be appointed by the President for the purpose of considering, and recommending such measures as may be deemed most proper for the adoption of the Convention.

Messrs. Cabell, Ruffin, Randolph of Albemarle, Semple of Spotsylvania, Hairston of Henry, Gooch of Henrico, and Craven were named as the Committee—to which, on motion of Mr. Cabell, the President was added, as Chairman.

On motion of Mr. Randolph,

Resolved, That the President may add hereafter to the Committee any other names, so that the whole number shall not exceed thirteen.

To give time for the Committee to act the next day, the Convention then adjourned to the evening of the 13th inst. at 7 o'clock.

Wednesday, Dec. 13th.

The Committee met, according to adjournment, in the Hall of the House of Delegates. Messrs. Garnett of Essex, Richardson of James city, and Fontaine of King William, had been previously added to the Committee.

The President addressed the Convention at length, in explanation and support of the general measures proposed for legislative aid to agriculture, and especially those recommended by the Committee.

Mr. Garnett presented the following report and resolutions from the Committee, together with a memorial to the Legislature, praying for aid to the increase and diffusion of agricultural knowledge—which were read, and then severally adopted by the Convention *unanimously*.

The Committee to which was assigned the duty of reporting on such measures as in their opinion it would be proper for the convention to act upon, beg leave to recommend the accompanying memorial to the favorable consideration of the convention, as containing just and general views of our necessities, and the remedies it would be proper to recommend; and should the memorial be approved by the convention, that a committee of four be appointed, to be composed of such members as can perform the service, to take charge of the memorial, with a view to present it to the legislature, and to attend on such committee as it may be referred to, to give explanations that may be required.

Resolved, That it is recommended by this body that an Agricultural Convention shall again meet

in the city of Richmond, on the second Monday in January, 1837, to be composed of delegates from the several Agricultural Societies in Virginia, and from any public meeting of members of the agricultural interest, in counties and towns where no such societies have been organized.

After the adoption of the memorial, Messrs. Randolph of Albemarle, Gooch of Henrico, Ruffin of Petersburg, and Peyton of Richmond, were appointed the Committee to lay the memorial before the Legislature.

The Convention then adjourned *sine die*.

The Memorial of the Delegates from the Agricultural Societies of Albemarle and Fredericksburg, and many other persons interested in agriculture, from various parts of the State, to the Legislature of Virginia.

RESPECTFULLY SHOWETH—

That the present condition of Virginia husbandry in general, and of her agriculture in particular, imperatively requires every effort which the wisdom and patriotism of your honorable body can exert in their behalf; that for want of legislative aid, although blessed with a soil, climate, and other natural advantages far beyond most of our old sister states, *we* decline in a degree as alarming as it is rapid, while *several of them* rise continually in relative prosperity and importance, as members of our federal union; that thousands of our fellow citizens, in utter hopelessness of bettering their condition in their native land, are abandoning the beloved homes of their nativity, for new and strange homes in "the far west;" that this expatriating epidemic is spreading with such fearful rapidity as to threaten the almost entire depopulation of extensive neighbourhoods, once the garden spots of Virginia, unless something can speedily be done to arrest its ruinous progress; and that for *this something*, we who will not yet "despair of the commonwealth," confidently look to you, our representatives—to you, the legislators of the land, who as certainly have the power, as we hope and trust, the desire also, to do for the vital cause of agriculture, all that we shall ask. Think not, we intreat you, that we are about to petition you for ourselves alone, it is for the best interests of our own dear state, and for the adoption of the only means left, (as we believe,) of rescuing her from that depopulation and political atrophy brought upon her by her own shameful neglect of all those natural advantages with which an ever bounteous Providence hath so abundantly blessed her.

The facts which we have stated are too notorious to be denied, too manifest to pass unnoticed even by the most careless observer. But their causes are not so obvious nor so recent, as to be well understood without an attentive retrospect into by-gone times.

Our ancestors generally, like all persons who live in countries wherein the means of subsistence are easily procured in superabundance, seem never to have looked forward to days of comparative scarcity, but wasted, in profuse and luxurious hospitality, the time, the industry, and the resources which should have been employed, *at least in part*, to secure pecuniary independence for themselves and their posterity. We say not this to censure those whom we have so much

cause to venerate and love, but merely as the statement of an important fact, which would be equally true of ourselves, could we be placed in a similar situation. We, their children, thoughtlessly trained up in the same habits, unwarned of our inability to indulge them to the same extent, have pursued a similar course. With means continually, inevitably diminishing by the constant subdivision of property, without any proportionate reduction in expenditure, we opened our eyes too late, to the startling fact of rapid decline, both in private wealth and state influence. Our commonwealth, once confessedly the first in the union—our beloved old state, who once gave away a principality for the preservation of that union, has lived to see the day when some, (we will not say which,) who gave *nothing*, together with many of the very receivers of her bounty, are jeering and taunting her with her comparative weakness. We would scorn to urge this by way of complaint, but we do it to rouse our fellow citizens, if possible, to a closer attention hereafter to our own state interests.

What aggravates much the evils of which we complain, is that, although our eyes are now wide open to the evils themselves, too many of us seem still utterly blind to the causes which have produced them. Thus you will find thousands most fatuitously ascribing them to our lands, our slaves, our geographical position; in short, to *any thing*, rather than to the causes just mentioned, and to our own habits of comparative indolence and improvidence. These, so long as they prevail, must continue to render useless every natural advantage that we either do or could possibly possess. We seem entirely unaware, that these deadly poisons of every community can never be cured by mere change of residence, or simply, by substituting the culture of cotton, and the sugar cane, for that of corn, wheat, tobacco, or any other staple of the old states. We either forget, or have never learned, that *without* increased industry and economy, the opportunity alone to make money will never cause its accumulation; but that with these indispensable qualities to the acquirement and preservation of wealth, even very *inferior* advantages of soil and climate will be more available than the richest lands the sun ever shone upon, to secure all the comforts, conveniences, and enjoyments of life, that rational men ought to desire. That we still have two of the indispensable prerequisites to the fruition of every blessing derivable from government, cannot be truly denied; prerequisites without which the wealth of the Indies would be totally insufficient to secure temporal happiness. These are, a public sentiment and moral force, fully adequate, and at all times desirous to maintain the majesty of the laws. We have a civil power too, fully competent to punish, in the most exemplary manner, all who violate the same, or commit outrages of the kind, either against the peace and order of our community, or the rights of its citizens.

In offering these remarks, we mean to make no invidious insinuations against such of our new states and territories as are continually receiving accessions of citizens from Virginia; let these emigrants themselves inform those whom they leave behind, whether they have changed for the better or worse, so far as regards the conservative influence of public sentiment over morals and

manners; the exerted power of the laws of the land; and the efficiency of the civil authority in compelling obedience to them.

We most solemnly assure our friends and relatives, who have lately left us, as well as the long settled and native citizens of the "far west," that we feel not the slightest inclination to exaggerate, or "set down aught in malice," against the land of their choice. Its prosperity must always be a source of gratification to us, for their sakes, however, we may individually suffer by some of the means of its promotion. If we have heard false accounts of their state of society, let them undeceive us; let them give us the truth; and should it prove that we have been misinformed although our opinions are derived from their own public journals, we will cheerfully retract, however we may lament the consequent breaking up of families, and the loss to Virginia of more of her best blood. We mean not to harm others, but merely *to be true to ourselves*. In doing this, we shall always deem it our duty to assert and maintain, until better informed, that life, liberty, and property, (the possessions which government was formed to protect) are *yet* more secure in most of the old states, than in *several of the new*, or in our territories: that the land of our nativity, drooping and care-worn, and depreciated as she is, may still be found all sufficient for the happiness of her dutiful and affectionate children: that they are under no political nor moral necessity to desert her; and that all true Virginians who will abide by their parent state, in all the vicissitudes of her fortune; who will determine to aid with heart and hand in developing *all her resources*, will promote, not only *her* welfare, but their *own*, much more effectually, than by a precarious search after the latter in strange and distant lands.

It is certainly true, that by abandoning our native homes; by tearing asunder all the domestic ties of early youth and mature age, we *may possibly* find, in some of our new states or territories, greater immediate opportunities of *making money*. But most of us must undeniably do this, at greater risk both to health and life: to the first, from a worse climate in general: to the second, from the additional danger for want of power in the civil authorities, as yet, to afford it adequate protection. The newspapers in most of the new states and territories, abound with uncontradicted proofs of this fact. Grant, however, that the opportunities have actually been found, while health and life remain unassailed, they will prove utterly unavailable, unless the emigrants also abandon and tear away those fatal habits of indolence, profusion and improvidence, which, in very many cases, have produced the supposed necessity for emigration. Whether increased facilities to get rich, and the actual acquisition of riches themselves, will also increase our power to conquer those bad habits which have forced many to expatriation, is a matter well worth the most deliberate reflection of all who are about, but have not yet finally resolved, to turn their backs on home, friends and kindred, for the sake of the single object—wealth. The desire itself we admit to be laudable, provided the motive be—to render our posterity free, independent and happy. But the wiser and more certain course to accomplish our purpose, is, in our opinion, to qualify them by thorough education to choose

for themselves the means of its attainment. To give our children money, will prove a blessing or a curse, according as they use it; but give them morals, manners, useful knowledge, industry and economy, and we may rest perfectly well assured that they will never misapply wealth in many of its forms, whether it be acquired by inheritance or purchase. Pardon this digression, and permit us to resume our efforts to develop the causes of our present depression.

The legislatures, in the early day of our commonwealth, seem never to have deemed it any part of their duty to go much beyond matters of mere local legislation and state police. Hence, the pernicious hallucination still to be found among us, that they really have no power to do more, as if to promote the general welfare of Virginia by popular education and internal improvements, were not quite as much a matter of legislative duty as taking care of oysters in the waters of the Chesapeake—prohibiting fish-traps in navigable streams, and preventing hogs from running at large in petty villages and towns. *Popular education*, that indispensable basis, that *life blood* of all republican government, without which it can have no healthful, no permanent existence—and *internal improvement*, the all-essential means of its prosperity and preservation, seem never for a moment, in those days, to have been thought fit subjects of legislative deliberation. A school to which every citizen could not send his own child, a road, or bridge, or canal, that each could not use himself, were looked upon, it seems, as contraband articles in our legislative halls. Even now, the attention of our legislators to these great objects of national interest and regard—these all-important elements of state welfare and influence, falls far short of their requirements.

Another most prolific cause of our fallen condition is, that at a later period of our political history, commencing with the presidency of the first Mr. Adams, and extending, we will not say how near, to the present times, our legislative watchmen have been looking more abroad than at home, for subjects to act upon. The selfish and demoralizing conflict of political parties, their victories and defeats, always achieved or suffered at some sacrifice of true republican principles, by strengthening the ability of the conquering party to abuse power with impunity, together with the making and unmaking of presidents and vice-presidents of the United States, appeared to be deemed much more important matters of state policy and interest, and more effectual means of maintaining our just rank, our relative influence in the union, than the making and unmaking of state laws, or the speedy development of all our internal resources and natural advantages, to the utmost possible extent. Instead of its always being made a primary question at our annual elections, who, among our candidates, were best qualified to promote these vital objects, inquiries totally irrelevant—inquiries solely into party qualifications, have, for years past, been almost the only ones ever made. This most inconsiderate and fatuitous course has been a source of unceasing exultation to all those wily politicians in our sister states, who envying our position at the commencement of our federal government, as head of the union, adopted a much more rational system of state legislation, for ele-

vating themselves to our level, and finally, for soaring far above us in regard to all the most effectual means of real political aggrandizement.—Our truly ridiculous state pride—ridiculous because content with ancestral achievements, instead of being stimulated thereby to noble deeds of our own, has aided our rivals much in their efforts for supremacy in our union—for this pride, self-satisfied, and consequently disdaining even to examine for a moment, its means of subsistence, has been feeding upon its own inanity whilst they were accumulating in their elementary schools, in their colleges, by their roads, canals, and agricultural societies, real and substantial materials for the only species of exultation which true patriots, real, devoted friends of our union should ever permit themselves to feel. Give us, we entreat you, us who rely upon you to save our state from ruin—give us the same just grounds for exultation, and our children yet unborn, will bless you for the deed.

The fatal consequences of our course might easily have been foreseen, and avoided, had not our party prejudices and passions been so aggravated and maddened by constant indulgence, as entirely to blind our judgments to the true interests of Virginia. These consequences are now deeply felt in the very vitals of the state. Large bodies of our citizens are daily fleeing from their native homes, as if they dreaded to be starved to death, should they remain in them longer, whilst those who are left behind, are plunged up to the ears, (all of which are stopped, except to their own confederates,) in reckless political strife, about matters over which they can rarely, if ever, have any effective control, instead of constantly and most anxiously directing all their united efforts towards the preservation of our dear old state from abandonment by her citizens and political degradation. We have only to continue our exterminating party quarrels a little longer, and we shall have nothing left to quarrel about, but the inexorable guilt of having ruined Virginia.

To you, our representatives, our "forlorn hope," in this fearful crisis of our affairs, we must look for some remedy, some curative process, if any can be devised, for the evils which are now spreading over the land like an all-destroying pestilence. Listen not, we entreat you, to any who will cry, "peace, peace, when there is no peace;" who would fain persuade you that "all is well;" that Virginia is fast resuming her former political importance in the union; that her voice is still attentively heard and highly respected in our national councils, and that little more than what has already been done for education and internal improvement is required to bring back those palmy, prosperous days she once enjoyed. Rather be assured, that without all the aid which you can give her, the diseases both moral and political, under which she is now suffering so intensely, must finally destroy or reduce her to a condition of which every true Virginian must be utterly ashamed.

These are very unpalatable truths, and some possibly may blame us for uttering them, nay, may accuse us of presenting too gloomy a view of our real condition. But we verily believe, that had similar exposures been more frequently made, our legislatures never would have wasted so much of their precious time in vain attempts to regulate the affairs of the nation, when both duty and interest required them to spend by far the

greater part of it in regulating our own state concerns, as the only certain means of sustaining our original rank in the union. The exercise of the latter right, none were likely to dispute, however we might differ about the mode; whereas all attempts to exert the former, have invariably resulted in aggravating our internal dissensions, and making "confusion worse confounded." In the mean time, all the best interests of our state were suffered to lie dormant, as matters that could be taken up at any time, and therefore were not taken up at all. These interminable quarrels, instead of purifying our political atmosphere, as party conflicts are said to do, by those visionary politicians who are led away by false analogies, have overspread the country with contagious moral diseases for which there seems to be no cure, nor any escape, since both the doctors and their patients are alike infected with them, and never come into contact without re-infecting each other.

Until very lately, we have almost entirely neglected the great, the vital elements of state prosperity and aggrandizement. We mean *popular education and internal improvement*. At the head of the latter stands *agriculture*; for, according as that flourishes or declines, so must all the other interests in the community also flourish or decline. Yet if there ever has been one solitary enactment designed specially to promote this first of all arts, we have yet to learn the fact.

It is certainly true, that your petitioners are all agriculturists, and may therefore be suspected of undue partiality for our own class. But we are unconscious of claiming, or even desiring more than our *real* importance, in all calculations of national good, entitles us to claim of all our legislatures who honestly make *that good* the object and test of every legislative proceeding. Always considering commerce and manufactures our natural allies, our political brethren, we have ever been ready to act towards them as such. But we know no better way of manifesting this fraternal regard, than by constantly fostering *our own interest*, as the most essential, nay, the indispensable means of cherishing *theirs*, and elevating them to the highest degree of attainable prosperity. On this deeply interesting subject, we have but one heart, one mind. Our sole and most anxious desire is, to promote, as far as we possibly can, the full development and proper application of *all* the resources of our beloved state; to consult together, with one accord, for *her* interest, *her* permanent good; and to devote to this vital cause, all the talent, and all the knowledge we possess. Difference of political opinion in regard to federal politics we certainly have among us; for where is the hole or corner of the state into which they have not found their way? But we have unanimously resolved, (strange as it may seem) that they shall neither disturb our deliberations, nor in any way mingle with our proceedings: Virginia resources and Virginia improvement by their fullest culture and development, being the exclusive aim of all our present efforts. If ever there was a time, since the establishment of our commonwealth, which, more than any other demanded such efforts, the present, most assuredly, is that time: and much do we hope, confidently will we trust, that our own harmonious co-operation, to resuscitate dear old Virginia, will be fully

met, on your part, by far more effective exertions.

Had our legislatures, in the incipient stages of our federal union, extended their fostering care, with due solicitude, to the agricultural interests of Virginia, and to the general education of her people, we have no doubt that most of the evils, if not the whole under which she now suffers, might easily have been prevented. But it is not yet too late, we hope, at least to alleviate, if not entirely to remove them, by future legislative effort, made during your present session, and cordially sustained, as we believe it will be, by your constituents. Something, it is true, has been attempted of late years, in behalf of popular education; but we cannot forbear to repeat, that up to the present hour, nothing, nay, less than nothing, (if we may so express ourselves) has been done for agriculture—the nursing mother of every legitimate trade, profession and calling in the community. Such, however, were the natural advantages of Virginia, that this shameful and ruinous neglect of them was slower than might have been expected, in producing all those disastrous consequences which ought to have been anticipated in time to prevent them. Hence the fact of their coming upon us, as it were, by surprise.

Some six or seven years have now elapsed, since the first unequivocal symptoms appeared of that emigrating pestilence, which has, ever since, been spreading desolation over the land, and emptying our towns, villages, and the country at large, not only of those who might justly be called the warts and cancerous ulcers of the body politic, but of thousands of our best and most valuable citizens. Whether the fear of poverty, or the lust of riches contributed most to produce this effect, it is now useless to inquire, since to whichever cause we ascribe it, the consequences have been alike fatal to our state influence in the union—alike fatal in tearing asunder all the natural ties of home, nativity and kindred.

During all this depopulating and portentous period, what, (we beg leave to ask) what have our legislatures done towards the cure or mitigation of this truly alarming state malady, so far as enactments to promote agriculture generally throughout the state could aid in supplying a cure? Why, they have appointed a committee of agriculture!! And what has the committee done? The answer possibly may be found in some of our legislative journals; it is no where to be seen in our laws; for the volume which contains them is silent as the grave in regard to all agricultural interests. This seems the more strange and unaccountable, when we reflect on the undeniable fact, that a very large majority of every legislature, since the establishment of our state government, has consisted of planters and farmers. Incompetent we cannot believe they were, nor are we willing to pronounce them guilty of treachery to their own class. But we must either do this, or suppose they must have thought agriculture not only capable of flourishing without legislative aid of any kind, but, in the exuberance of their generosity, must have deemed her followers (to borrow the comparison of an English statesman,) like sheep, always ready and willing to be sheared, even to the skin, for the exclusive benefit of others. *This* is a kind of quixotic patriotism, to the motives of which we are willing to accord all the praise it may deserve,

when tested by the true principles of sound political economy; but we cannot go farther, and must protest against its adoption, as the rule of legislative action for any of *our* immediate representatives. If any sacrifice of agricultural interest be proved to be essential to the general welfare, *let it be made*; not a man of us will say *nay*: all we ask, and *that* we have a right to require, is, that the case be clearly, indisputably, made out; that *we* who pay all the taxes, either directly or indirectly; *we* who thus defray all the necessary expenses of the government under which we live, should enjoy at least such a share of its protection, its care and pecuniary aid, as our relative importance to the general good unquestionably entitles us to expect.

Under these circumstances, we will not permit ourselves to doubt, that *you* to whom we look up for all the good which wise and salutary laws can procure for us, will immediately apply every means in your power to remedy the omissions and neglects of your predecessors in regard to the great agricultural interest of Virginia.

If any examples were wanting to prove that legislative aid may rightfully be given to these interests, we would confidently appeal, not only to several of our sister states, whose wise law-givers have been content *to act*, while we have been consuming months and years in fruitless debates about *the right and the mode of acting*; but we could cite the history of every civilized country under the sun. Not one of them, we believe, can be named, which has not established either agricultural professorships, or agricultural schools, with experimental farms attached to them, or state societies, or boards of agriculture, or some public institution, of similar character, demonstrating, incontestably, that in *all* these countries it is deemed a long settled, wise and highly essential part of national policy to legislate for the promotion of husbandry in each of its branches, but especially of agriculture. Even Scotland, that country which it has been the fashion of some narrow minded people to ridicule for its poverty, has distributed in the course of half a century half a million of dollars to the tillers of the soil, in the form of agricultural premiums, thereby augmenting her agricultural products to the amount of several millions of dollars. Within that period, Virginia has distributed not one solitary cent! in any way whatever, for the promotion of *her* agriculture, although until very lately, she has been almost *exclusively* an agricultural state.

What have been the consequences in all the countries referred to, of this parental, legislative care of agricultural interests? Why, that *in every one of them*, without a single exception, however inferior to Virginia, in soil and climate, the condition of its husbandry in general; and especially of its agriculture, *has been and now is* far, very far superior to ours. From these facts, the incontestable inference is, that legislative aid is absolutely essential in every country, whatever may be its natural advantages, to the most prosperous condition of its agriculture, and that the connexion of this vital art with science, and its necessary dependence thereon, to reach its highest state of improvement, are quite as demonstrable as in case of any other art whatever. The truth is, that this connexion between science and art—this mutual dependence upon each other, *has existed*

since the world began, and *must last* to the end of it, however the pride of ignorance, and the obstinacy of folly may strive to represent the two as separate and distinct in some instances, and in the case of agriculture, as warring against each other. That such preposterous fatuity should still find any abiding place in Virginia, may be justly attributed to the absence of all legislation on the subject; for had there been any, it is scarcely conceivable that it would not have recognized the essentiality of science in agriculture, and thereby have had a most salutary effect in extirpating the contrary most pernicious belief from the agricultural portion of our community.

In our own confederacy we have the highly praiseworthy example of our sister state of New York, to prove how greatly agriculture may be advanced by legislative aid; for all who have taken pains to inform themselves concur in ascribing the rapid improvement in every branch of *her* husbandry, to the establishment and operations of her state agricultural society. *Might not we, Virginians*, hope for at least equal advantages from a similar state institution? That we should derive still greater, we deem almost certain. First, because the interests of commerce and manufactures bear a much less proportion to those of agriculture in Virginia, than they do to the same interests in New York; and secondly, our sister state is daily *gaining* most rapidly, while we are *losing* in population, wealth, and federal influence. Consequently, any measure which would tend to retard, or entirely to check this loss, (as legislative aid to agriculture must do,) would be more beneficial in proportion to *us* than to *them*. We suggest this argument, not from envying their flourishing condition—Heaven forbid, since our unalterable attachment to the union, which we anxiously hope may survive all the fearful conflicts of party politics, will always lead us to rejoice in the prosperity of our confederate sisters, however we may lament our own short-sighted policy in failing to profit by their wiser course in matters of state legislation. So long as we continue a united people in honest and zealous efforts to maintain our federal union in all its purity and unrivalled excellence, so long will it be vitally necessary that we should both believe *in* and *act upon* the principle of each state's having a deep and abiding interest in the welfare of every other state. If *one* should happen to prosper more than the *rest*, either from superior natural advantages, or wiser and more beneficent laws, the true patriots and statesmen of the others, instead of fomenting causes of jealousy and ill-will, should be continually cheering their fellow-citizens, in the noble race of national improvement, with the animating exhortation of—"go ye and do likewise." State influence in our confederacy may *justly* be the aim of each; but *just means alone* should be pursued to attain it; and these are *just, wise and patriotic state laws; just, wise and patriotic state policy*; but above all, *great talents and incorruptible virtue in the representatives of the state, in our national councils*.

Deeply impressed with the truth of the foregoing views, and thoroughly convinced of their tendency to arrest, or at least to alleviate, most of the evils under which all the best interests of our beloved state are *now*, and *long have been suffering*, your memorialists most earnestly and anxiously pray, that you will give them your immediate and

most deliberate attention. Our case, we consider one of life or death—a case wherein the patient must inevitably die, unless the family physician acts with skill, promptitude, and decision.

Your memorialists farther beg leave respectfully to solicit your attention to several plans for the benefit and improvement of Virginia agriculture, either of which, in our opinion, would soon cause her poor and desolate fields to assume quite a new aspect. Were one or more of these plans adopted, you would inspire hope where none now exist—you would revive that which is nearly extinct, and would call forth, by the certainty of legislative aid, that enterprise and exertion which alone are wanting to accomplish a great and most salutary change. *This, if any thing*, would effectually check the desertion of our fellow-citizens, now so rapidly leaving us forever. Many, without doubt, would still seek distant lands to mend their ruined fortunes; but more, we verily believe, would attempt to ascertain, with greater certainty than they have done, the chances of disappointment, while still a greater number would cordially embark their all with that patriotic band who have pledged themselves never to give up the good old ship Virginia, while there is the most distant hope of rendering her once more sea-worthy, but to sink with her, (*if sink she must*), rather than suffer her to be wrecked, merely for want of a sufficient number of strong hands and resolute hearts to man her in the hour of distress, and save her, if possible, from utter destruction. Most true it is, that formidable dangers threaten her from various quarters; alarming breakers and whirlpools appear on almost every side, and steer as she may, escape seems hardly practicable. But with so gallant and skilful a crew as she *once* had, in revolutionary times, and as she *might have again*, (for their indomitable spirit still animates many of their descendants,) she may yet resume her place, and hold on her course amidst the bravest and the best, after weathering all the storms she *has had*, or *may have* to encounter.

To some of your honorable body, this may possibly appear to be the pitiful language of political cowards, or the still more despicable slang of selfish alarmists, who will address you in any terms, whatever, that may subserve their own exclusive interests. But confident as we are in *your ability* to discriminate, and in *the unalloyed patriotism of our own views*, we will most cheerfully submit to your determination in regard to the prayer of our memorial.

One of the plans which we beg leave to propose, is the establishment of an agricultural professorship in our University, *never to be filled by any but a scientific and practical agriculturist*, with a salary of \$1,500, to be paid out of the unappropriated balance of the literary fund; and in connexion with this, an experimental farm of one or two hundred acres, to be purchased with the same fund; upon which farm the pupils of the professor should be required as a part of their duty, to labor a certain number of hours every day. Such an institution would furnish, in a few years, a body of hardy young men, skilled both in the theory and practice of agriculture. They would be qualified, at once to become proprietary cultivators of farms, or managers of them for others, instead of spending a large portion of their lives in acquiring the little knowledge they usually pos-

ness of such matters, when, by our plan, they would have ready for use, all that was necessary. the moment it was called for.

Your memorialists further suggest, that should the experimental farm be established, a fine opportunity would be furnished to redeem the pledge given at the creation of the literary fund, which was, that a youth of good moral habits and intellectual promise, but too poor to educate himself, should be selected from each senatorial district by the entire delegation in both branches, and placed at the University, as the adopted children of the commonwealth. These youths, together with the other pupils of the professor, would furnish all the labor necessary to conduct the farm, and yet have ample time to acquire great literary attainments. By this course, such a number of young men would be redeemed from ignorance, and possibly from vice also, at the same time they would be rendered virtuous and intelligent, as greatly to add to the general intelligence, and prove invaluable in disseminating agricultural knowledge. By such a feature in the administration of the University you would at once destroy the chief ground occupied by its enemies, that it is an aristocratic institution; and in relieving it from the prejudices excited against it by this outcry, you would unite both high and low, rich and poor, in its cordial support.

Another plan is, to establish a state agricultural society, or board of agriculture, somewhat similar to that in New York to consist of one member, a practical agriculturist, from each congressional district; that their duty should be to meet annually on the same day with the legislature; to sit only weeks, and to receive the same pay for the time as the members of the legislature, to which they should always report before an adjournment, on all such matters as they might deem worthy of legislative action.

A third plan, which in our view promises equal, if not superior advantages to either of the foregoing, is to employ a competent person, with a sufficient salary to defray all necessary expenses for two years, whose duty it shall be to make an agricultural survey or critical examination of all the best cultivated parts of the Atlantic states; and to make a written annual report to the legislature of all the most approved methods within each state, of clearing, draining and fertilizing land; of cultivating, harvesting and preserving the staple crops of the same; of improving, rearing and keeping farming stock of every kind; together with a particular description of all the best agricultural machines and implements. This would form a body of husbandry as valuable to us Virginians, as the Husbandry of Arthur Young, and the Rural Economy and Agricultural Surveys of Marshall, made under an appointment of the English board of agriculture, proved to the agriculturists of Great Britain. That *her* agriculture has flourished more, beyond all comparison, since the publication of those works, than it did for double or quadruple the time before, is a fact universally acknowledged by all who are well informed on the subject; and that a similar work would produce similar effects with us, cannot, we think, admit of a doubt. It would soon be in the hands of every farmer and planter who reads with a view to improve in his profession; state pride

(so often misdirected and misapplied), would aid them in using it for good purposes; and it would prove a highly useful manual to young and inexperienced agriculturists, not yet too wise in their own conceits to profit by "*book-farming*," as it is contemptuously styled by many of those who can scarcely read the works which they most foolishly affect to despise.

At present we have no agricultural work similar to those to which we have referred, nor any thing, indeed, comparable with them, although no imaginable reason can be offered why we should not have them. It is true we have very valuable agricultural papers, among which we take a pride and a pleasure in naming our own Virginia Farmers' Register. But the information these papers contain is necessarily very miscellaneous; often of little or no importance; insulated and diffused at different times over so wide a surface, and mixed up too with so much irrelevant matter, that to form a connected system of husbandry out of the whole, properly arranged under distinct heads, would be a labour that very few men, if any one, could be able and qualified to perform, not to insist upon the fact, that *none* of these periodicals can possibly have yet published all that is known and beneficially practiced by the best farmers and planters of the United States. A work of the kind would immediately make every one who read it acquainted with all the improvements in every branch of husbandry throughout the most highly cultivated portion of our country; whereas, for the want of some such publication, some such authentic record of the progress of agricultural science and practice, we find many parts of Virginia, not very distant from each other, almost a century behind other parts in these highly important matters, and still more behind some of the northern and eastern states. All who have travelled through these states within a year or two past, know the foregoing statements to be true to the very letter, however mortifying and degrading the fact may be in the estimation of every true hearted Virginian.

Is it not, therefore, high time that we should take shame to ourselves in regard to the present condition of Virginia husbandry? If ever it is to be done, "*now* is the accepted time." But to your honorable body we must look—to *you* we must most earnestly appeal to create and apply the necessary stimuli for rousing us from the deadening lethargy which has so long paralyzed all efficient desire for improvement in the *only things* which can save our state from sinking to the very bottom of the federal scale, after occupying for so many years the high standing which she once did. These things, we must again repeat, are *popular education and internal improvements*, at the head of which stands *agriculture*. They should be simultaneously carried on, because their action is reciprocal and because they are absolutely essential to the general good, as well as to the purity and preservation of all those republican institutions, to establish which, our venerated patriots of the revolution shed so much treasure, so much blood.

All which is respectfully submitted.

JAMES BARBOUR, Pres.

EDMUND RUFFIN, Sec'y.

SEED WHEAT.

An amusing and instructive anecdote was related to me of a farmer in Vermont, to whom his neighbors were accustomed to resort, for the purpose of securing their seed wheat; and was able to supply with that which was very superior in its appearance, productiveness, and early maturity, which he was accustomed to call barrel wheat, and which readily commanded three dollars per bushel, when other wheat was sold for one dollar, and one dollar and a quarter. The secret was at last discovered. He used, before thrashing his wheat, to select the best sheaves, and striking them over the head of an open barrel, three or four times before laying them down to be threshed, obtained in this way a superior seed. As in this way the largest and earliest ripe kernels would be shaken out, and fall into the barrels, he obtained what might be considered a select seed which he denominated his "*barrel wheat*;" and which the farmers, until they heard how to do it for themselves, found their advantage in purchasing.—*Coleman's "Notes by the Way."*

FOREIGN ABSTRACT.

Advices from Europe to the 1st January, has been received, which is thus briefly summed up by the U. S. Gazette.

It appears by the speech of Louis Philippe, that the offer of mediation, on the part of Great Britain, recently accepted by the Government of the United States, was previously made to, and accepted by the government of France. The English papers, it will be seen by our extracts, are warm in their commendation of the honorable and pacific tone of the President's message.

It seems that the French Government was so anxious to procure the President's message before the opening of the Chambers, that it caused a steamboat to cruise in the mouth of the channels, to intercept the New York packets before their arrival at London or Havre. The tone of the English press is altogether favorable to the attitude of the United States.

Some indignation is expressed that Louis Philippe should wish to retain possession of the French conquests in Africa. His troops have recently had some further success near Algiers.

Money is plentiful in England, at 3½ per cent. on business notes.

It is said that there is another conspiracy against the life of the king.

Affairs in Greece look better. The change in the government, which bring into councils the natives of the country, will be productive of good. Colocotroni, who, some years since, was sentenced to death by the Greek Government, is made a member of the Council of State.

An insurrection in Sardinia, assumes a serious aspect.

CONTENTS OF THIS NUMBER.

Notices—of a correspondent's request to republish R. K. Meade's letter—of the Virginia agricultural proceedings, and the importance of union and action among agriculturists—of a sewing machine—iron melted with coal—account of imported blood horses—ancient Mexican cotton manufactures—method of preserving fence posts—rice grass as hay—appropriation for a geological survey of the state of New York—proceedings of the agricultural convention of Virginia—the barrel seed wheat—foreign abstract—advertisements, &c.



GARDEN & AGRICULTURAL SEEDS.

THE subscriber has just received and is now opening a large and superior assortment of European GARDEN and RARE FIELD SEEDS, growth 1835, and raised by persons of such character that he will expressly warrant the genuine quality of every article put up. Dealers supplied on the most advantageous terms either by the pound or bushel, or neatly put up in papers for retail. Priced lists furnished on application.

Of the endless varieties of Cabbages, Lettuce, Peas, Beans, Cucumbers, &c. none are retained in his catalogue but such as are known to be truly excellent, and such as answer our climate. The most prominent seeds now receiving and in store, are,

25 varieties of PEAS, among which are several new and rare sorts; the most prominent kinds and best bearers are Cromwell early frame, green dwarf Imperial, Knight's tall marrow fat, and Bishop's early dwarf, the latter only attaining the height of 12 inches.

50 varieties BEANS—The English Windsor, long pod, dwarf marrow fat, white cluster, French speckled, Noris pole, and Asparagus Beans are preferred sorts.

35 varieties Cabbages, for early and late sowing, for cattle, &c. For culinary purposes I will only name the following superior kinds, viz. Early Dwarf, or Scotch York, Bullock's Heart, Battersea, Flat Dutch and Drum head; and for cattle the large German and Cow Cabbage or *Casarian Kale*, the latter affording a great abundance of green fodder at a season when food is scarce, and is worthy the attention of farmers.

12 varieties Cucumbers, early and late sorts, small Gherkins for pickling, and KEENE'S EXTRA LONG GREEN PRICKLY, a superior sort for pickling or common use.

12 varieties Cantaloupe and Water Melons.

12 varieties of RADISH. The finest kinds are the early red Turnip Radish, Mason's short top scarlet and yellow Turnip Radish, the two last named are superior sorts, particularly the latter, which is unrivalled and well suited for spring, summer or fall sowing.

10 varieties Turnips; for table use the large white flat, raised at our seed garden, still retains a decided preference over all imported sorts for early or general fall sowing; the long yellow or carrot shaped is also a desirable kind for spring use, or standing out during the winter. The Ruta Baga and Large yellow Bullock are preferred for cattle.

ALSO,

BEET seed, several sorts; Carrot, early and late, and large do. for stock; Cauliflower, Broccoli, Celery, Cress, Pepper, Salsify or vegetable oyster, Squash, common sorts, and several fine new kinds; Rhubarb for pies and tarts: this fine vegetable, too much neglected in this country, is sold in immense quantities in the London markets and is esteemed as one of the most important and useful vegetables.

FIELD SEEDS.

English Ray or Rye Grass, St. Foin, Burnet for sheep pasture; Scarlet Trefoil or *Trifolium incarnatum*, Yellow Trefoil, Green Sward or Lawn Grass, Gama Grass seed, Millet, Hemp, Lucerne, white French Clover, Oats, several imported kinds, weighing 44lb. per bushel, early Potatoes, best English and American, Mangold Wurzel, large Altringham Carrot, &c. Also sweet scented Vernal Grass, and Italian Rye Grass.

I will also have in store in a few days 250 select varieties of FLOWER SEEDS: great care has been taken to select only such as are desirable.

ROBERT SINCLAIR, Jr.

Light, 3 doors N. of Pratt street, Baltimore.

feb 9

2t

FOR SALE.

A DURHAM Short-horn bull 15-16 blood. He is from a fine cow and got by Col. *Powel's* celebrated bull *Monk*—now two years old. Price, delivered at York, Pa., \$130.

Letters addressed to the editor *post paid*, will be attended to.

nov 10

2t

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured....	pound.	11	—
Shoulders,.... do.....	"	10	—
Middlings,.... do.....	"	8½	9
Assorted, country,.....	"	7	8
BUTTER, printed, in lbs. & half lbs.	"	18½	25
Roll,.....	"	20	—
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old....	each.	3 00	6 00
COWS, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 68	1 75
CHOP RYE,.....	"	1 81	1 87
Eggs,.....	dozen.	—	—
FISH, Shad, No. 1, Susquehanna,	barrel.	7 75	—
No. 2,.....	"	6 75	—
Herrings, salted, No. 1,.....	"	4 00	4 12½
Mackerel, No. 3,.....	"	5 75	—
Cod, salted,.....	cwt.	3 00	35 0
LARD,.....	pound.	10	10

WHITE TURKEYS.

A few pair of White Turkeys would be purchased at the Agricultural Repository in Light near Pratt street, by
ROBERT SINCLAIR Jr.
de 29 3t.

SHEEP AND CATTLE.

THE Editor of the *Farmer and Gardener*, Baltimore, is authorised to sell a part of the stock of SHEEP & COWS of John Barney, Esq. so well known as a successful breeder, while he resided at *Fort Penn, Del.* The Sheep are of the Bakewell breed, and he has been particular to keep up their purity and integrity of constitution, by periodical importations of rams to prevent the evil consequences of breeding in and in. The price is \$50 for rams and \$25 for ewes. Ewes with lambs by their side, deliverable first of April, \$35.

Among the rams there is a most splendid animal, imported by Mr. Barney from England, the sire of many of his yearlings—his price is \$100.

His Cows consist of about 20 in number, and have been bred for their fine dairy qualities. They are large sized and all deep milkers. There are among them 7-8 and 3-4 Durhams, Durhams and Devons, Durhams & Simms' imported breed, and crosses with a favorite French bull imported some years since by the late *Stephen Girard*, Esq. The price of these cows are \$100 each.

To those who are acquainted with the reputation of Mr. Barney as a breeder and grazer, it is unnecessary to add any thing in favor of his stock; but to those who may be unacquainted with him, it may be proper to observe that his great pride with respect to his sheep, has been to combine weight of carcass with yield of fleece, and that his object with his cows has always been, to breed for size and deep milking, and that thirty years' experience has not been lost upon a gentleman of his close and acute observation.

All letters upon the subject must be *post paid*. feb 9

GAMA GRASS SEED.

JUST received, a fresh supply of Gama Grass Seed. This is the grass that bears cutting every 15 days for soiling, and every thirty days for hay, from the middle of May till frost, say till the middle of November, and has yielded at the rate of 64 tons to the acre under peculiarly favorable circumstances, and from an acre of which 30 tons may be calculated upon. The earlier it is sown in the spring the better.

ROBERT SINCLAIR, Jr.

Maryland Agricultural Repository, Light near Pratt street.

feb 9

FOR SALE ON MODERATE TERMS.

THE editor of the *Farmer and Gardener* has for sale two most beautiful Devonshire Bulls, rising three years of age each, of pure and celebrated blood. Also, one Bull 4 years old, a cross between a full bred Durham bull and a pure Devon cow. This noble animal combines in a remarkable degree the good points of both breeds. To gentlemen of the south who may desire to improve their stocks of cattle, the present is an opportunity rarely to be met with. All letters to the editor upon the subject must be *post paid*. de 29

A BROOD MARE FOR SALE.

A SUBSCRIBER in Virginia writes to us as follows:

"I have a considerable stock of Blood Horses on hand, which would allow me to spare a Brood Mare, by the celebrated *Contention*. Should any gentleman wish to breed from any of the imported or other horses in the south, it would afford a fine opportunity to purchase her and have her served before taking her to the north. She is young, has brought two colts, and can be accompanied by well authenticated testimonials of pedigree, as her sire is well known, and her dam was once owned by Col. Wm. R. Johnson."

Any person desirous of purchasing a Brood Mare of the above description, can be supplied by addressing a letter to the Editor of the *Farmer and Gardener*—*post paid*.
Feb. 16. 4t.

TO AGRICULTURISTS—The analysis of Soils, marls, mineral waters, and other productions, interesting those engaged in Agricultural pursuits, is performed with promptness and accuracy, by

TYSON & FISHER, Chemists,

3t Druggists, No. 192 Market street, Baltimore.

DEVON STOCK.

THE editor of the *Farmer and Gardener* can at all times supply orders for *Devon Cattle*. This breed is so distinguished for their easy keep and docility; the richness of the milk of the cows, and for the activity and sprightliness of the oxen, that they would be admirably suited to the purposes of southern agriculturists.

The happy adaptation of the *Devonshire Oxen*, for the purposes of the farm, will be understood, when it is stated that 4 oxen have been known to plough 2 acres of ground in a day, and a team of them to trot at the rate of six miles an hour with an empty wagon.

Any person wishing to procure them can be supplied by addressing a letter *post paid* to the editor of the *Farmer and Gardener*. nov 10 4t

SAXONY RAMS.

The editor of the *Farmer and Gardener* has for sale 2 full blooded *Saxony RAMS*, and 2 ¾ blooded do. These sheep are of a family remarkable for their fine fleece, their wool always commanding the best prices in the market.

ALSO

The bull *Brilliant*, a large sized animal of the Improved Durham Short-horn breed. He is red and white; was got in England, and calved in Frederick county, Md., on the 12th May 1829. His dam was Matchless, got by Favorite, (purchased at the sale of the late R. Colling, a celebrated breeder) son of Favorite, dam by H. Allison's Gray bull, sire Orlando, that died on the passage from Liverpool, out of Rosina, from Yorkshire, that gained the highest prize premium of ten sovereigns at a Cattle show in Manchester, England. no 3

RUFFLE OATS.

For seed, may be had at the Maryland Agricultural Repository, Light street, Baltimore, by application to Dec. 8 JAMES MOORE.

STOCK OF IMPROVED SHORT HORN DURHAM.

THE editor of the *Farmer and Gardener*, Baltimore, has for sale two 7-8 and four 3 4 bred cows, 2 full bred and seven 7-8 bred bulls of the improved short-horn breed. They are all fine animals whether regard be had to their milking or fattening propensities. Their pedigrees are indisputable, all tracing to the *British Herd book*. They will be sold low for cash, their excellence being considered. To any person, company, or society, who may want several, a great bargain would be given.

Letters addressed to the editor upon this subject, must be *post paid*. nov 10 4t

TERMS OF THIS PAPER.

Price five dollars per annum, payable in advance. When this is done, 50 cents worth of any kind of seed on hand will be delivered or sent to the order of the subscriber with his receipt.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 43.

BALTIMORE, MD. FEBRUARY 23, 1836.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, FEB. 23, 1836.

PROGRESS OF THE SILK BUSINESS.

Concord Silk Company—A company was formed last June, in the town of Concord, New Hampshire, with a capital of \$75,000 for the purpose of carrying on the Silk culture extensively. The company has purchased a farm consisting of 250 acres, for which they paid \$4,000. They have an agent who resides on the farm, and manages it under control of a president and board of Directors. The farm is situated very eligibly about 2½ miles from the town of Concord. The company have already planted 4,000 trees and intend to add a much greater number next spring. As the land will be cultivated for other purposes, the trees have been set out 15 feet by 6, which gives nearly 500 to the acre. The past season the land occupied by the trees was planted in potatoes and yielded about 150 bushels to the acre without any manure except a small quantity of plaster of paris. They intend to commence feeding about 100,000 worms next season.

If the company desire to make a profitable business of their enterprise they should have planted their trees in the hedge form, as the same quantity of ground will yield twice the quantity of foliage, and is much easier gathered than when planted as standard trees.

The New Jersey Silk Manufacturing Company.—We perceive by an extract from a letter published in the *Belvidere Apollo*, that an application has been made to the legislature by the citizens of Warren County, New Jersey, for an act of incorporation for a company under the above name, whose object is to cultivate and manufacture silk in all its various branches,—thus, adds the letter, “when this company commence operations, a market will be opened at home for all cocoons, which our farmers’ wives and daughters may raise.” Its capital is to be \$300,000.

A Patriotic Enterprise.—We learn from the United States Gazette, that Mr. Pierce of Philadelphia, has at his place, in Mount Airy, near Germantown, about eight acres of ground, fully supplied with the white mulberry trees, upwards of six thousand of which will be large enough in the spring for the use of worms. It is, we learn, Mr. Pierce’s intention to increase the size of his mulberry plantation.

We know nothing of this gentleman personally, but we most sincerely congratulate him on his public spirited undertaking, and wish him, with all the cordial good feeling of which we are susceptible, entire success: but of that he is certain; for that generous spirit of enlarged enterprise that has induced him to engage in this business, will ensure it to him. The example he has set his neighbours and countrymen, will exert a moral influence that will not only secure to him present respect and esteem, but will entitle him to the gratitude of posterity. The time is not distant when men will feel proud in establishing their claims to being pioneers in this good work, as it will entitle them to the name of public benefactors; for whose pretensions to that title can be stronger than those of him, who was amongst the earliest to practically engage in a business, which will be, in 20 years from this, capable of increasing the products of the land as many millions of dollars, and of giving employment to thousands and tens of thousands of destitute widows and their fatherless children.

Atlantic Silk Company.—A company has been recently formed at Nantucket, Massachusetts, whose object is the immediate establishment of a silk manufactory, in connexion ultimately with measures for the production of the raw material by means of mulberry plantations, cocooneries, &c. They contemplate commencing with between thirty and forty thousand dollars.

A company has been incorporated by the legislature of Ohio, who intend to enter into the silk business extensively.

Sir John Sinclair, Bart. died at Edinburg, in the latter part of December, aged 82 years. He was a member of the Privy Council of Great

Britain, and had written upwards of 100 volumes on Agriculture, Finances, the Influence of Climate, &c. It may be truly said, that no man of the present age has done more good to the world than has this eminent individual. His principles of husbandry will live throughout all time, and entitle him to the appellation of being a benefactor of mankind. How sweetly the mind treasures the recollection of one whose reputation, like that of Sir John Sinclair’s, has been earned by deeds of virtue—whose genius and talents were exerted in successful efforts to improve the condition of his species—to add to their moral and physical comforts, and to elevate the character of the tillers of the earth.

MORUS MULTICAULIS.

In our 38th number, after stating the fact that the seedsman of our establishment had failed in obtaining seed of this valuable tree from France, we expressed the hope that the nurserymen throughout the United States, would appropriate the largest of their trees to the purpose of raising seed. Since which we have seen several intimations that the seed of the *morus multicaulis* would not produce a tree like its parent. However sincerely these fears may be indulged in, and we do not doubt they are sincere, we do not believe that they are well grounded; indeed, we do know from the best authority, that the seed of the *morus multicaulis* will produce its like; and why should it not? Is it not as distinct a species of the mulberry, as the black, red, or white, or any other? Does not the seed of each of these produce plants identical in all their characteristics with their respective originals? No one will doubt this, because there are a million of witnesses to prove the fact. Then why should we withhold the possession of a like capacity from the *Morus Multicaulis*? Is it because the demand is great, price high, and policy might indicate the propriety of keeping up the idea that they cannot be propagated from the seed? The tree is a stranger of some 8 or 9 years standing in our country, wholly unknown to ninety-nine hundredths of our population, and of course the chance of keeping up the delusion that the seed will not produce its kind, is a good one. But the fact stands opposed to the assertion; for trees, the same in every particular, have been rais-

ed in this city from seed grown also in Baltimore. If the demand for the trees could be supplied by the means of propagation used at present, then no necessity for a resort to seed would exist; but when the increased and increasing call for the plant, from all directions of our country cannot be met, and there is no likelihood that the supply for ten years, in the old way of cuttings and layers, can be made equal to the consumption, we hold it that duty and patriotism alike point to the course we have suggested. The prosperity of a whole country should not be retarded in its march by any considerations of personal aggrandizement—the growth of a great staple commodity should not be held in check to gratify the cupidity of any set of men.

There is no necessity for sending to China for seed, if our own people are guided by a proper spirit of patriotism. We have the tree here—it has borne fruit, and from that *fruit* plants of the genuine *Morus Multicaulis* kind have been vegetated. What more is asked? Why then should the modes of propagating be confined and limited? Why should not *all* the mediums of multiplying the plants be resorted to? The *seed* can be sent by mail, and the tree can thus be made to reach districts of our country that there are no means of sending either cuttings or trees to; and if there were no other reason, that should operate to produce the measure we proposed.

We should really like to know what is meant by those who speak so *feelingly* through their fears, when they say that it will not produce its *like*. Do they mean that it does not produce *fruit* precisely the same as the parent tree? or do they mean, that it will not produce a tree bearing that fine, ample, silky leaf, as large as a plate, for which it is so highly valued. If they mean the former, we reply we care not what the fruit may be, it is the *leaf* that the worm consumes. If they mean the latter, we meet them at once with a flat denial; and we affirm, that it will produce that large and luscious foliage upon which the silk worm so delights to banquet, and from which such beautiful, glossy, and elastic silk is made.

If we had any doubts as to the *morus multicaulis* withstanding the severe frosts of our winters, which we have not, for if planted on a high, dry, sandy or gravelly situation, well protected, it is competent to live as long as any other tree. We say, if we had any doubts upon this head, we would resort to the propagation of the plant for seed with the view of accommodating it to our climate, for the experience of the world has long since proved that it is practicable to make the offspring raised in a country grow and survive the ills

of climate, even when the parent of exotic origin, could not exist at all. The operation of this principle is not confined to the vegetable tribe; it is equally existent with regard to man—it is the universal law of nature by which the springs of life are regulated.

GREAT CORN CROP.

We insert the following paragraph with pleasure, as we hope it will serve to stimulate our farmers and planters in the good work of *improving* their lands, instead of casting their eyes to the setting sun as their forlorn hope. With good management, there is very little of the arable land of our country, but might be made to produce, in seasonable years, more than the aggregate below mentioned of the whole 79 acres, or even more than that of the best field of 22 acres, which was 100 $\frac{1}{11}$ bushels per acre. We think we can demonstrate this. Earl Stimson, of Saratoga county, N. Y., whose crop of corn exceeds 5,000 bushels, averages above 100 bushels to the acre; his land is naturally a light sand: he plants his corn 2 $\frac{1}{2}$ feet apart each way. Now suppose we plant an acre 3 feet apart, and let four stalks stand in a hill, and we know it would grow and mature at this distance, from the example mentioned above;—if then we plant at this distance, and we allow each stalk to produce two gills of corn, it will give us 152 $\frac{1}{2}$ bushels to the acre. In an acre of ground there are 43,560 square feet, which planted 3 feet apart either way, being divided by 9, the square of 3, would give us 4840 hills of 4 stalks each, and these yielding 2 gills each, would make 1220 gallons, or 152 $\frac{1}{2}$ bushels of corn. If we come down from the aggregate of acres to the product of stalks, surely there is no one acquainted with the prolific character of this valuable grain, but would at once concede all we have asked. We have before said, and again repeat it, that there are but few farms in the country that might not be brought to yield an average of 100 bushels to the acre, by the proper use of lime, marl or other calcareous earth, stable and barn-yard manure, and the turning in of a few green crops, either of clover or buckwheat.

Great Corn Crop.

Mr. Philip Reybold, of Red Lion Hundred, has sent us the following statement of the crop of corn produced last season, in three of his fields. Mr. Reybold is probably the largest farmer in New Castle county, and the following results will show that he may fairly claim a rivalry with the best in the country:

One field of 22 acres,	2216 bushels.
Do. " 30 "	2249 and 3 pecks.
Do. " 27 "	1819 bushels.
79 acres,	6284 and 3 pecks.

It will thus be seen that in a field of 22 acres, the yield exceeded 100 bushels of corn per acre. The whole crop on 79 acres, averages nearly 80 bushels.—*Wilmington Jour.*

THE RIBBON GRASS AGAIN.

A southern subscriber writes us the following account of an experiment he has made since the publication of our friend Robinson's essay on the virtues of this grass, in transplanting it in a bog or quagmire, the result of which is not only highly satisfactory to himself, but is entirely corroborative of the statement made by Mr. R. The attention of gentlemen having unproductive marshes or bogs on their estates, should be awakened to the importance of the subject, and they should certainly lose no time in following the example of our correspondent, by carrying out the experiment of Mr. Robinson:

"This grass I have known ever since I was a child. In different sections it has, like other plants, different names—It is called *Ribbon*, *Fancy*, *Fortune*, *Puzzle*, *Ladies'*, and even, I believe, is sometimes called *Witch's Grass*. I am confident you must have seen it, for I am greatly mistaken if I have not seen it in the Cottage Gardens in the suburbs of your city. It is the grass which many years since was much used on the borders of flower beds, and is in truth highly ornamental. Its general appearance when in a body, is that of deep green, but on examination, each leaf or blade will be found striped with white, yet no two can be found precisely alike, hence it is said by the boys that he who finds two precisely similar has made his fortune, and his lady love shall not refuse her smiles. From the ease with which it is cultivated, more I think than from its want of elegance, it is now generally ejected from the gardens of the rich, but the cottager, who seldom loses his taste for the beauties of nature, yet gives it a place in his little domain, and I doubt not that you will easily find and recognise it in such situations. In our little village, I think I shall procure a sufficient quantity to plant half an acre the ensuing spring. You recollect that I did not commence taking your interesting publication until September, though I subscribed for the back numbers. On the night of the first day of October, while watching by the bed-side of a sick friend, I indulged myself during the slumber of the patient, in looking over back numbers of the *Farmer and Gardener*, and my eye caught Mr. Robinson's publication. Before the sun rose, I went into my garden (for I am not rich enough to eject it) and directed my servant to dig up about two square feet of the tufts, and immediately planted it in a morass near my house—a morass subject to occasional overflows by the tide, and one which has hitherto defied all my power to drain or dry, by ditching and dykeing. Though planted so late in the season, it grew apace, and now covers more than twice its original surface. There are even at this unusually cold time, green blades upon it. Some pigs were running in the morass when it was planted, and I observed that although it grew rapidly, they cropped it constantly, and seemed to prefer it to any other food. With that which

was growing in my garden, I tried both horses and cows, and they eat it greedily, though it was old and partially dry. It is my opinion that this grass, together with the Gama, are much more than doubling the value of southern States. The latter flourishes in dry and almost barren sands, and the Ribbon, (which in honor of Mr. Robinson, we ought to call Robinsine) I have no doubt will be found capable of converting pestiferous marshes into productive lands, and thereby subserve the health as much as the interest of the southern Atlantic States. For the covering which I anticipate from it to the dirty bog near my house, I would not accept any sum that could be offered. Indeed I think a few years must show how much we are indebted to the discoverer and publisher of its value and use, and for myself I am pained that I am unable to express my gratitude only by the feeble use of words.

While planting the grass, a tuft unobserved fell into a ditch, in which water always stands a few inches, and sometimes to the depth of two feet. In a week this tuft shot up spires several inches in length, and continued to grow until the weather became cold, since which it has disappeared; whether dead or not, the spring will decide. I also cut off some of the spires without root, and stuck them in the mud; they grew off at once, and I drew some of them afterwards, and found they had shot out roots in every direction; but since the cold weather they too have disappeared, but I hope yet to see them burst into life with the returning spring. You will at once say that I am an enthusiast, to make such high estimate upon such slight grounds, and so indeed I am. I know that this is not a fair trial, but it is a trial under every possible disadvantage—the season late, the place a perfect quagmire, so very spongy as not to bear a man without the aid of a plank to sustain his weight; yet here it grew rapidly. I know it bears summer sun on high land, and therefore have no fear for it in the swamp, since I have found it to flourish well in that situation. Should no unforeseen accident intervene, I will next autumn give an accurate statement of the result of my experiment. You may think this is written for publication, but it is not so intended, and yet I am anxious that the value of the *Robinsine* should be known; but I am not a farmer except in theory and in contemplation—my possessions number less acres than my age numbers years, and therefore I cannot be “a teacher in Israel.”

[From the Silk Culturist.]

Sir,—Having never seen in the publications of the day, any statement of the quantity of leaves raised from the *Morus Multicaulis*, we will inform the readers of your valuable publication, that last spring we set out several hundred cuttings on land composed of dry sandy loam, at the rate of 14,000 to the acre, and each cutting produced on an average eight ounces of leaves. At this rate one acre will produce seven thousand pounds, and allowing one hundred pounds of leaves for one pound of silk,* it will give seventy pounds of silk to the acre, which at the low estimate of \$4.50 per pound, will amount to \$315. Trees two years old upon the same soil, averaged 2 1-2 lbs. of leaves each. The next year it is our intention to

ascertain from *actual experiment*, the quantity of silk that can be made from one acre of cuttings planted in the manner above stated, and we entertain no doubts whatever, the result will be seventy pounds.

Yours, &c.

R. & F. CHENEY.

Manchester, Nov. 13, 1835.

* *Note by the editor of the Farmer and Gardener.*—The general estimate as tested by the experience of feeders of worms both in Europe and this country, is, that 50 lbs. of foliage will feed 1,000 worms during the season, and that on an average it takes 3,000 worms to make a pound of silk: there have been to be sure instances where a few hundred cocoons have made a pound of silk, but in calculations of the character of this, it is always best to take the general maximum average. If we take these premises then as our guide, Mr. Cheney's cuttings would have made 46½ lbs. of silk instead of 70 lbs. to the acre; but even that is a most flattering and astonishing result. We feel highly gratified at the very interesting information communicated in his letter. We assumed in our *manual* that trees at four years old would yield 4 lbs. of foliage; his actual experiment goes strongly to prove that our calculation was, as we intended it should be, greatly below the capacity of the plant—his trees at 2 years old produced 2½ lbs. of foliage, which convinces us that 4 year old trees, judiciously managed, would yield twice the amount of foliage we have claimed for them, which would greatly enhance the value of the culture, particularly in its more incipient stages, over and above our estimate.

Agreeably to the request of our correspondent at Allen's Fresh, and our promise in our last number, we give place to-day to the subjoined letter written by the late Richard K. Meade, in 1828, descriptive of his breed of sheep. At the date of his letter the price of both sheep and wool were in a very depressed state, and the prices which he was then enabled to get, is strong proof of their superior excellence.

[From the Winchester Republican.]

SHEEP.

TO THE FARMERS OF VIRGINIA.

Having by a very gradual and attentive system of breeding, acquired a flock of sheep meeting in a great degree my anticipations, and believing them too valuable to pursue the ordinary modes of reducing their number, the subscriber has resolved thus publicly to offer for sale annually a few ewes and rams, provided he can obtain from five to ten dollars for the ewes, and double that sum and upwards for the rams, in proportion to their merit; which course he will pursue, until he shall consider himself perfectly justified in setting aside a flock under a particu-

lar appellation, as a full blooded original stock: at which time a moderate and uniform price will best comport with his own convenience, and he hopes the interests of a great community of farmers. At present, only a portion of the male offspring would be offered as intrinsically worth the price which may be put on them. The ewes will, in every probability, be in lamb by his most favourite rams, one of which at the last shearing produced 14 pounds 6 ounces of such fine, long wool, as the subscriber thinks best adapted to the various demands of our domestic manufactures—the rams, a choice of his raising (save a small selection,) for the improvement of his own flock. As there is happily a growing taste and curiosity amongst our farmers, it may not be amiss to state that these sheep are composed of—first, the remnant of an English breed imported before the revolution, (and highly celebrated in their day for their mutton qualities,) crossed by the Arlington long wool, improved by Mr. Custis from the Persian stock of Mount Vernon; at this period 124 sheep averaged 8 1-2 lbs. of wool too long for ordinary purposes, the best sample of which was sent by Mr. Custis of Arlington to Dr. Logan of Philadelphia, measuring 16 inches in length; was next crossed by the large French and small Spanish merino, until too great a sacrifice of quantity was made for fine wool during the well remembered merino mania. Most fortunately some of the progeny of that remarkable sheep exhibited at Friendly Grove, called Frederick Bakewell, (the premium ram,) and weighing more than 200 pounds, were employed to restore the lost mutton and wool. From that time to the present period, an in-and-in system has been strictly pursued: many of the finest ram lambs have been saved every year, in order to afford the best selection, with the view of combining the important properties of quantity and quality of wool, size, and early maturity of mutton.

The ewes he offers for sale are a portion of a flock, the best average of which, in the last three years has been equal to 8 3-8 lbs, individuals having sheared from 11 to 16 1-2 lbs.; half a dozen rams, averaging 13 1-2 lbs.; ewes of the first shear reaching frequently to 10, 12, and as high as 14 1-2 lbs. As it regards size, or the mutton qualities, at least one dozen widders and rams have the present year weighed from 150 to 194 lbs., averaging 165 lbs. The fleeces of the first shear rams averaging 12 3-5 lbs.; widders, 10 1-6; ewes, upwards of 8 lbs.: a diminution readily to be accounted for in rather too great preponderance in favour of the fine wool.—Its length is from 6 to 7 inches; the quality of the greater part of it may be inferred from an extract of a letter annexed, from Mr. Anthony Morris, a gentleman well known for his distinguished attachment to the interests of agriculture, and its future elevation through the medium of appropriate education, and his friend Mr. Smith, of New Jersey. Mr. Morris says, “I have delayed my reply to your last favour, until I could receive from my friend Miles Smith, Esq., of Brunswick, New Jersey, who is one of the most extensive and intelligent practical agriculturists of the middle states, and particularly distinguished among them for his discriminating knowledge in the varieties of value and fineness of their wool, his o-

pinion of the properties and value of the specimen sent me from your flock. He says, 'The sample of wool sent is one of the finest he has ever seen, and particularly so from its great length of staple; combining these two good qualities in the same animal is a great acquisition; the length may be owing to its being the first fleece, (as it truly was,) and perhaps will never be so long again. It would be very desirable to know from your friend's experience, whether the staple of wool from his flock has improved or otherwise in that southern climate, and what time they have been in the state; if fed on the mountain or plain, and also the quality of the soil. We have been offered 30 cents per pound cash for all our wool, say 2,000 pounds of full blood; but I think your friend's sample would readily command 35 cts., or perhaps more.'"

From an exhibition of a variety of samples in the course of a tour to the eastward last fall, similar opinions were entertained and expressed.

In raising this flock, which but little exceeds one hundred, (the labour and pains of the last twenty years,) the subscriber has been for the better half of the time experimenting, with the view of ascertaining what kind of sheep would best suit his interest in the various aspects presented by the subject; and he believes, from his present experience, that such sheep as possess sufficient size for mutton, and combine the qualities of early maturity, quantity, and quality of fleece, are such as will be most advantageous to him, and consequently to all others having the same demands on so important a material of our domestic manufactures. For several years past he has been endeavouring to bring such sheep to the greatest degree of perfection. How far he has succeeded is left for others to judge; but he is confident in the belief that much is left for him to do, and resolved in the determination to spare no pains or expense in raising them to still higher degrees of improvement, and as a further means of promoting an end so desirable, and affording at the same time a stimulus to general exertion, a *silver cup worth fifty dollars*, is offered to any one who shall produce in the month of May next, a ram and ewe superior to those of the subscriber, (combining the aforementioned qualities;) the sheep to be retained in exchange for the premium.

The expense of improving this flock has not been less considerable than the time. From \$30 to \$240 has been paid for many rams, and he has never received more for any individual than the lesser sum (30) lately, from a neighbour; the first fleece of which ram weighed 15 pounds, and would, in all probability, in England, have commanded his hundreds.

The subscriber would wish it to be distinctly understood, that he does not intend to intimate that these sheep are of such quality as to produce the very finest of wool, or the greater possible quantity, either the heaviest frame for mutton; it is only in combination they are decidedly his choice. The business of fine wool raising is best promoted by the Saxon full blood merino, or some of the French or Spanish blood. The greatest possible quantity of wool, by a judicious mixture of fine, coarse, long, without special regard to form or breed, but having an eye

to size, &c.; for the most superior mutton, sheep possessing moderate size, well made, active in their habits, wool of moderate quality, thin on the back, none on the belly, and not long any where. The nicest and most philosophical attention to wool on mutton sheep, will promote their good qualities in proportion to the cleanness and sweetness of their exterior—the heavy, gross, mutton sheep, on large square limbs, short wooled and coarse.

It is thus plainly to be seen that the different kinds of sheep cannot be brought to their greatest perfection unless separately and distinctly bred. A first rate mutton weighs 120, 30, 40 lbs.; 100 lbs. is considered a fair and a full weight, where the wool in quantity and quality forms a portion of the value of the animal; from 80 to 100 has been the usual weight of the widders of the flock in question, under the disadvantages of castrating only the most indifferent lambs. When age and favouring circumstances combine, 100 lbs. is attained; 15 lbs. is a reasonable average for their tallow, as they are always fat, as high as 28 and 30 have been obtained of rough fat. Of the large wooled breeds of sheep, from 20 to 30 lbs. of wool have been shorn; the finest merino yields but 2 1-2 or 3 lbs.; and what will our common country stock produce? Why, 2 or 3 lbs., if the brambles have not torn it from them; and a considerable part of that will fly away in the manufacture of it, from the degeneracy of its fibre.

It has been by some argued that wool is too low in price to license any additional expense in improving it, while others make great efforts to conquer that difficulty by doubling their number of sheep. How very erroneous both are, needs but a little reflection and experience to discover. It is true that economy, and the greatest industry, observation and skill, are absolutely essential to success in the honest pursuit of a living to be deducted from the soil, in the present state of our relations with each other, and with the world. But a small additional capital, is as necessary at times to the farmer as to the merchant. Instead of ruining the soil by multiplying mouths, rather double the fleece, and improve its quality, that its fabrics may last longer, be more comfortable, and afford a greater and better supply. It cannot be too urgently insisted upon, that if skill and judgment, observation and attention, are left out of the question in such matters, so will profit also—degeneracy must continue, and ruin frequently close the scene. A moderate, but improving price for wool, will be the inevitable reward of those who cherish with proper care their flocks.

The subscriber is indebted to some of his nearest neighbors for their testimony in favour of his sheep. He might have multiplied it to any reasonable amount, but prefers, that future facts should speak for themselves, especially as he contemplates an endeavour to be useful in the diffusion of information on this and on other subjects connected with agriculture, and hopes that a late introduction of the short horn cattle will enable him to reciprocate benefits with a widely extended grazing country. In the meantime his own improved stock will afford a small supply, having calves, as he believes, from three to six months old, weighing from 300 to 600 weight on the foot. An attention to the cultivation of the mix-

ed grasses has much diminished his corn cultivation, and as the advantages of improving cattle, and sheep in particular, becomes more apparent, so in proportion will the corn culture be diminished.

RICHARD K. MEADE.

White Post, Frederick co. Va., Sept. 8, 1828.

CERTIFICATES

The subscriber is enabled, from personal observation and experience, to certify fully and entirely to the correctness of the facts stated by Richard K. Meade, Esq., in the above publication; and he with pleasure avails himself of the opportunity of thus testifying to the remarkable success with which this gentleman's efforts have been crowned, and to the high value and importance of the breed of sheep thus obtained. He is better qualified to do this, from the fact of his having for several years past been in the constant habit of viewing and examining this flock throughout the whole season, and especially as he during that period attended closely and minutely to Mr. Meade's shearings, taking samples, and frequently weighing individual fleeces; in addition to which, as a member of the committee appointed by the Agricultural Society of Frederick county, to take into view the merits of the different lots of sheep offered for premiums at Winchester, in the fall of 1826, his attention was particularly called to a lot of these sheep to which two premiums were awarded, as combining, in a very high degree, size, beauty of form, and value of fleece as to quantity and quality.

The flock of the subscriber affords a striking illustration of the rapid and manifest benefit to be derived from a cross of this stock; having in many instances shorn from sheep possessing not more than three-fourths of this blood; and without any extraordinary degree of care or quantity of food, from 9 to 12 lbs. of wool.

In reference to size and beauty of form, the general improvement in his flock has been obvious, and some individuals of the flock, he feels confident, would in these respects lose by a comparison with no sheep in our country, the Dishley only excepted.

T. F. NELSON.

Frederick county, Sept. 12, 1828.

I was present at the last shearing of Mr. R. K. Meade's sheep, and was requested by him to pay special attention to the weight of sheep and their fleeces, length and quality of the wool, order of the sheep and cleanness of the wool. Having occupied part of two days in attending to that duty, and having since examined the above report, in relation to that shearing, it gives me pleasure to testify to its correctness. I consider the wool very fine for its length; and remarkably clean for unwashed wool; and having dealt considerably in sheep myself, I freely say I know none worth comparing with his sheep for excellent qualities combined.

THOMAS KENNERLY.

Frederick county, Sept. 10, 1828.

I purchased in the month of May last, of Richard K. Meade, Esq., a ram lamb of the first shear,

weighing 162 lbs. and producing 14 lbs. of fine, long wool, after having been first divested of the tags. He was shorn in my immediate presence.

JOHN KERFOOT.

Frederick county, Sept. 4, 1828.

[From the American Gardener's Magazine.]

THE DAHLIA.

Observations on the *Dahlia*, its species and varieties, by John Lewis Russell, Professor of Botany and Vegetable Physiology to the Mass. Hor. Society.

The surpassing beauty and brilliancy of the dahlia has raised it, in the estimation of the floral taste, whether considered in its single unadorned simplicity, or when brought to the acme of perfection by the ingenious labors of the horticulturist. Scarcely unrivalled by the unique elegance of the camellia, it has become, like that remarkably transmuted plant, as universal a favorite among the curious and wealthy; and still more a companion of the antique and venerable accompaniments of the cottage garden, or the village flower-bed of some humble admirer of nature's sportive wonders, such as may be found in every community, and not by any means few in our own, happy, smiling New England. Perhaps the moral and mental improvement of a people cannot be better estimated, surely not better promoted, than in the observation and introduction of the spirit of the love of the more elegant and refined occupations attendant on agricultural pursuits. For my own part, I want no better proof of a feeling and exquisitely sensible mind, even under a rough and rude exterior, than may be observed in a love of nature, particularly that which relates to the care of flowers. A rose-bush, a honeysuckle, a pæony—famed in village love for pharmaceutic worth—a lilac bush, or even a huge tuft of the singularly striped "ribbon grass," preserved by some rustic enclosure from the trespass of those sober, useful, though less intelligent, tenants of the farm-yard, whose tastes are more alimentary than mental—all denote a higher order of mind, in some tidy housewife, or younger female; and when I discover the highly patronized dahlia, lifting its rich blossoms among the associates of its new and strange locality, to me it proves the gradual development of a purity of taste and feeling, which, though not incongruous, is not always to be expected in such scenes. From the elevated sandy meadows of Mexico, where, scarce half a century since, they were probably first known, and shortly after, was transferred from the Mexican Botanic Garden, the species, and almost innumerable varieties have extended with a greater rapidity and more accompanied admiration over the civilized world, than perhaps any other vegetable. The rich alluvial soils of the South, and the hard rocky lands of the north, are adorned with their cultivation; and with a singular accommodation to circumstances, they evince scarce a preference in the expansion of their blossoms, for one section than another. It is presumable, however, that heat is injurious to the perfection of their flowers,—a defect which might be obviated in a great degree by application of more moisture. Naturalization, or acclimation, cannot speedily, if at all, be expected in our northern latitudes, unless occasionally accidental escape from the effects of frost be deemed such, which has been known in this vicinity in several instances; and a case was

mentioned of a root exposed to the winters of several years, protected entirely by the early and deep snows so common in the mountainous regions of New Hampshire. In the Azores, they are lifted out of the soil at the approach of the winter season, and left exposed on the surface till the returning spring, undoubtedly with the view to give a temporary repose, and secure a greater amount of flowers.

So much has been said and written on the subject of my present remarks, that I can scarcely be expected to offer any thing new; and it is only with the design of presenting your Magazine with a succinct account of the early history and rapid progress of this superb flower, together with whatever observations may suggest themselves, that I undertake the task. Mr. Joseph Sabine, in the third volume of the "Transactions of the Hort. Soc. in London," has drawn up a very able and exceedingly interesting article, embracing all that was known at that time (1818;) but as it may not be easily available to many of your readers interested in the subject, I shall consider it a sufficient excuse to pursue my intentions.

"The dahlia," says Count Lelieur, "was originally from Mexico, and introduced into Europe in 1789."—"From the Botanic Garden at Mexico, it was sent to that of Madrid, where it flowered for the first time in 1791." Cavanille (an ecclesiastic and eminent botanist) dedicated the genus to Dahl, a Swedish botanist, a disciple of Linne, and the author of a work on his "systema Vegetabilium." "In the same year (1791,) he gave the description of three varieties sent from Mexico, which he considered as three species, constituting the genus *Dahlia*, viz. *pinnata*, *rosea*, and *coccinea*" (*Memoire sur le Dahlia*, &c. pp. 3-4.) In the number for March, 1835, of this Magazine (Vol. I, p. 114,) some observations were made on the restoration of the old name of the genus, given by Cavanille, and altered from erroneous impressions of its being already appropriated—strengthened by a similarity of sound to Dalea, belonging to an entirely different natural order and artificial class. Wildenow, in his *Species Plantarum*, applied that of Georgina, after Georgi, an eminent Russian Botanist, and De Candolle adopted it, apparently on such authority. With a similar desire of imitation, or the universal mania after new names, the florists of this country were fast falling into the supposed improvement, regardless of the untenableness of one averred objection, and the gross impropriety of violating that rule of every scientific nomenclature,—that the original name should be sacredly preserved, to the exclusion of every other, unless founded on good and substantial reasons of real physiological difference. It was with unfeigned pleasure that I therefore hailed the restoration of *Dahlia*, and trust that the disciples of the illustrious star of northern Europe shall confer honor, and shed some reflected glory on the plant, which was dedicated to his fame and memory.

In the third volume of the "Annals du Museum," we find a memoir on the *Dahlia*, by M. Thouin, accompanied by a colored plate of three varieties, viz., *rosea*, *purpurea*, and *coccinea*, probably answering, at least in color, to the three species of Cavanille,—*rosea*, *pinnata* and *coccinea*. M. Thouin remarks that *rosea* was of the size *Aster chinensis* L.; and from the plate, it seems to re-

semble a prototype of "Queen of Naples," a somewhat old variety. One of these varieties is figured with semi-double flowers,—a fact not a little remarkable, as this plate was issued in 1804, and Count Lelieur mentions that not until 1817 could he obtain even two or three double varieties; about the same time, indeed, that the Dutch florists began to procure theirs from seed. A similar curious fact was observed in the difference of seed raised at Anteuil and St. Cloud, the richer soil producing only pure and simple flowers, whereas the thinner and lighter soils of the former place was only prone to produce the seeds of double varieties—accounted for on the philosophical principle, that it was a greater effort to produce a perfect seed than an imperfect one; that is, one capable of continuing an accidental and physiologically considered monstrous development of petals instead of stamens.

After several attempts to reduce to species the different varieties of this flower, each botanist and cultivator adopting some trifling character, founded on the form of the leaves, or color of the flower, De Candolle discovered that the essential distinctions consisted in the absence or presence of fertile florets in the ray, and termed in the second edition of *Hortus Kewensis*, *superflua* and *frustranea*. Mr. Sabine reduces under the two following species of De Candolle the several synonyms, as quoted from the *Hortus Kewensis*:

1. *Dahlia superflua*, caule non pruinoso, flosculis radii femineis.

2. *Dahlia frustranea*, caule pruinoso, flosculis radii neutris. (*Hort. Kew.*, ed. 2, vol. v. pp. 87-88.)

By this arrangement it will be perceived that two species are formed, the first with "smooth stem and fertile florets in the ray;" and the second with a pubescent or "hoary stem, and barren florets in the ray."

How far this arrangement has been observed, I have little means of determining. Loudon, in his *Hortus Britannicus*, gives a catalogue of sixty varieties of *D. superflua*, and only five of *frustranea*. But even with the characteristic differences which Sabine lays down, as to the coarseness of foliage and diffuseness of habit in *superflua*, and the delicacy, compactness and erect manner of growth in *frustranea*, I very much doubt whether in this country it would be easy to detect the species in the astonishing varieties of our gardens. It is almost certain that color would afford no test, although the original color was referable to purple in the former, and that of orange or scarlet in the latter. Still more uncertain the downiness or pubescence of the stems, which, though more or less observable in all, does not seem to constitute a permanent character. A series of experiments should be instituted, in order to endeavor to trace any observance of this specific difference of De Candolle, in the seedlings of our double varieties; and also whether, in this instance, unobserved, a real hybridizing process has not taken place between the two supposed genuine species.

It may be deemed presumptuous to seemingly question the authority of such celebrated names; but it must appear an important, and surely therefore a harmless inquiry, especially when we consider the tendency to confusion in such a myriad

host of abnormal individuals, as our catalogues of the varieties of dahlias present. I trust, therefore, to the candor of discriminating minds, that nothing but a deep interest in the cause of scientific truth could for a moment prompt such an inquiry.

Such a theory has been conceived before, from the failure of the Genevian botanist's characters, as also from other circumstances, which render it a still more interesting query; and at no better time could it be settled, unless it has already been done, than now, in the height of the universal popularity and general admiration which the subject of it obtains, as an ornament of our gardens and parterres.

It is a curious subject for reflection on the changes effected in horticulture, to be able to trace the opinions of learned men, founded in sound reason and observation, taking, for a moment, the situation they occupied, and casting a glance forward to our own experience and knowledge, which confirms or disproves their theories. Thus De Candolle foretold the improbability of the occurrence of a blue variety, and we have almost every combined shade and primitive color of the prismatic bow, excepting that Mr. Sabine tells us of the existence of a double white, which he feels inclined to doubt, and now "Kings" and "Queens," there are double white, and even "Mountains of snow," and beauties of antiquity, unrivalled only by the elegance or purity of these fragile flowers; the grandeur of an avalanche exhibited in a petal, and the winning loveliness of female character shining forth in an abortive stamen.

But, with all the attractions of great and good and illustrious names, and the wondrous transmutations of floral skill—for wondrous they truly are—the simple, unadorned elegance of a fine single flower, with eight perfectly formed petals and golden centre, expanding gradually into the florets of the disk, presents to my ideas a lovely work of nature's skill. Surely it is a mistake to exclude from our collections these primitive forms to give place to double varieties only; and during the last season, one such has actually insinuated itself, of however only tolerable merit, more it may be suspected from its royal title or foreign origin, than from any returning taste to floral simplicity.

The Dahlia, like many other cultivated plants, seems very prone to sportiveness or variation in the tints and pencillings of its petals. Cultivators begin to recommend the use of strong and nutritive manures in producing very fine flowers, an opinion entirely counter to one formerly entertained and practised upon,—that of planting in poor and meagre soils. Undoubtedly the former practice is the better one, and added to this, the fact, that but a moderate degree of sun and heat is necessary to their increase, there can be no reason why the multiplication of flowers is not almost wholly at the disposal of the grower. The natural localities have been discovered to consist of sandy mountainous meadows, of 48 to 5,400 feet above the level of the sea. A sandy meadow, in such a situation, may not be a poor or meagre soil; on the contrary, it is most probable a very rich one, being composed of the alluvial deposit of the decomposition, both mineral and vegetable

of the upper regions. It is certain that the effect of poor soil on the plant is to weaken the tendency to produce rich flowers, by the poverty of its entire growth, and that, when liberally supplied with suitable food and sufficient moisture nothing can surpass the exuberance of its blooms.

The value of the Dahlia seems confined to its intrinsic beauty and hardness, as an ornamental plant. Many futile attempts have been made to introduce it among the esculent roots; but it would require a savage appetite, or a love for novelty, to bring this about. Its tubes, nevertheless, abound in farina, but the supposed presence of benzoic acid destroys their palatableness. The compositæ, in their general characters, though of great importance to mankind in their medical properties, offer few articles of nutritious food. The tubes of the tuberos sunflower, improperly and commonly called "Jerusalem artichoke," are indeed considered by some as delicate food, and the disk of the genuine artichoke is used in some countries extensively as an accompaniment to the table.

Every season brings to the dahlia some new insect foe, which attacks its valuable and tender buds, or devastates its foliage. The grasshopper (a common green species) and the *Syrphid erythraea*, with *Membracis bubalus*, better known to the unscientific as a two-horned triangular bug, has been peculiarly busy for a few seasons past. While some unknown pest, of a green and smooth larva, luxuriously riots on the rich petals, or undermines the leaves. A small dipterous (?) insect was also observed for the first time this year, but I was unable to detect any such new depredator. Nothing but a careful examination and diligent use of the fingers in seizing and crushing the intruders, with perhaps some liquid application to the roots, which should promote a more speedy and vigorous growth, is a preventive. It is to be hoped attention will be paid to this view of the subject, that some method may fortunately be devised to save from disappointment the promised glories of our finest and rarest plants, or at least that these insidious mischief workers may be known and exposed.

I conclude this article with only one question to the experimental florist, viz., whether sufficient experiment has been made, as to soil or exposure, to insure the perfection of bloom in that rich and superb variety "Levick's Incomparable?" Every one who attended the last annual exhibition of the Massachusetts Horticultural Society, must remember a remarkable specimen, which graced the magnificent display of its sister varieties, and which was produced in the immediate vicinity.

JOHN LEWIS RUSSELL.

Salem, Jan. 1, 1836.

[From the Tennessee Farmer.]

SUBSTITUTE FOR THE SPADE.

I have discovered a much easier and more speedy method of digging garden ground, than that performed with the spade, which is merely to substitute in its stead, the common manure-fork,—one, however, made square at top for the foot to rest on, would be better. Mine is a coarse 3 pronged fork, the tines 8 inches long, $\frac{1}{2}$ inch wide, and $\frac{1}{2}$ inch thick at the shoulder, and tapering to the point, and 7 inches in breadth, bent as much as a common spade—the handle straight or

nearly so, and $4\frac{1}{2}$ feet long. The advantage in working is, that it is easier forced into the ground than a spade, and the upper end of the handle being thrown forward to nearly arm's length, the fork descends perpendicularly into the earth—then, instead of lifting and turning, the process is rather rolling the lump over by lever power, first breaking it loose, then as the handle, with one hand near the end, and the other about the middle descends, the arm rests on the knee, and the forward hand becomes the pivot of a second lever, of less power than the first, and sufficient with a little forward motion, if the ground is somewhat adhesive, to turn over almost a cubic foot at once. If it inclines to turn backwards drawing the fork partly out will generally obviate that difficulty, but sometimes the old method of lifting and turning must be resorted to.

Ground dug in fall or winter, I conclude should be left rough, as presenting more surface to the action of the frost and air, it is in better condition in the spring than if made smooth, though finely pulverized.

Very respectfully yours,
G. H.

Dec. 12, 1835.

Silk in New Jersey.—As an evidence of the facility with which the mulberry may be raised, and the silk manufactured in this country, we quote the following from the Bridgetown (N. J.) Washington Whig:

We have in our possession a few skeins of sewing silk, raised and manufactured by Dr. S. Marcy of Cold Spring, Cape May, which we pronounce first rate. Mr. Marcy writes that he manufactures about four pounds annually from a few shade trees at his door. He likewise has an orchard of four acres of trees planted last spring. This looks like entering into the business with spirit.—Success cannot fail to attend the enterprise.

A SINGULAR TREE.

Haverstraw, Rockland Cy. N. York, Dec. 25.

We are credibly informed that there is now standing in the north part of this town, an apple tree, set out by a Mr. Teneyck upwards of 30 years since, and which now exhibits the following singular phenomena. About 30 years since, and late in the fall after leaves of other trees had fallen to the ground, this tree put forth buds, and on the very eve of winter appeared in full bloom, with all the green leaves, the full bloom blossoms, the odor, and beauty, and freshness of May upon it. Since that time, but one half the branches of this tree have borne each year; that portion of the branches composing the south, half, bearing one year, and those composing the north, the next year, and thus alternately changing from year to year. The branches that do bear, during the time of their barrenness, appear entirely dead, but the next season they revive again, and put forth their blossoms, while the opposite branches, as by preconcerted arrangement, take their place and seemingly dwindle into decay.—*North River Times.*

Mr. Clay has recently imported for his farm at Ashland, Ky., 8 or 10 of the finest cattle that have been seen in that state.

From the New England Farmer.

WORMS IN THE HEAD OF SHEEP.

The few but valuable remarks on the *æstrus ovis* and its progeny, which appeared in No. 4. of the current volume of the Farmer, will, I trust, receive the attentive and extensive consideration of agriculturists which their importance demands, and that the prophylactic suggestion will be adopted, "an ounce of prevention," &c. The losses sustained in some parts of the country by sheep owners, from the attacks of the insect, are, I believe, much greater than is generally supposed, and the cause is oftentimes wholly unknown.

Sheep affected by the 'worm in the head' soon pine away; it is impossible to fatten them. A constant running at the nose commences, first of a glary mucus, which is succeeded by bloody and corrupted matter. They rub and sometimes strike their heads against fences, &c. and I have observed them, particularly lambs, froth at the mouth, and jump into the air until, exhausted, they would fall to the ground.

Having in several instances succeeded in curing them, even in the last stage of the disease, I have thought the remedy I employed might be worthy of publicity—During the autumn of 1883, my flock consisted of about sixty sheep, most of them recently purchased. During the fall and winter, a number of them died; but not until in the spring, when I had lost fifteen or sixteen ewes and as many lambs, did I discover the cause. Opening the head of one to see in what condition it was in, I found several dark-headed, white worms, varying from one half to three fourths of an inch in length, and one eighth of an inch in thickness. The cartilage of the nasal organ was in a sadly corrupted state. A number of the other sheep were apparently near their end from the same cause. Selecting three of the worst, I tried what I thought a desperate experiment, pouring a tea-spoonful of spirits of turpentine down each nostril. It evidently gave them considerable pain at first, but I soon had the satisfaction to see them quietly grazing. I then administered the dose to all the dirty nosed sheep in the flock, and do not now remember losing one that was full grown for many months. Last spring I found they were again affected, and repeated turpentine potions, mixed however with an equal quantity of olive oil, which I thought would render it less liable to injure the sheep. The result was again successful: and, though I had despaired of ever curing some of them, this autumn the whole flock has gone to the shambles.

In several of the heads I examined, I found a long white worm, not thicker than a common knitting needle, evidently of entirely a different genus; and on one occasion, I washed with a syringe and warm water from the nose of a lamb a mass of them that would have filled a cubic half-inch. The lamb died under the operation.

Be so good as to inform me if the *æstrus ovis* deposits its egg "from the middle of August to the middle of September."—How do the worms get into the nostrils of lambs in the spring?

Very respectfully,

SAM'L ALLISON.

Yardville, N. Y. 10 mo. 10th, 1885.

EMIGRATION FROM VIRGINIA.

The following is truly a gloomy picture:

From the Norfolk Beacon of Dec. 14.

"We give up a large share of our paper this morning to subjects connected with the all-important questions of Internal Improvement and the increase of Bank Capital. Disguise it as we may, the destiny of the Old Dominion must be decided by the present Assembly. If we do not enter into the spirit of the times—if we do not cast aside ancient prejudices—and act up to the feelings and wants of the present day, the most awful calamities will ensue. Our population in the course of another year will depart by hundreds and thousands, and our state will be undone. The very last Danville Reporter states that more than *one thousand* negroes have been carried by their owners to the South during the past year from Pittsylvania! What a drain from a single county! Albemarle has lost, it is said, near *two thousand*, and most other counties in nearly the same proportion. Thus is the wealth of the State running through our fingers, and when it only remains for us to shut our hands, we have not the resolution for the effort. Emigration is devouring us alive, and if we stir not in time, the season of relief will be past. We venture to say that if the present Assembly does not respond to the real interest of the State, we are gone—the public pulse will have fallen too low to beat healthy again. Feeling as we do on this subject, we are bound to provide that so far as we are concerned, the public shall not sleep in false security. Our paper this morning contains the strongest evidences of the dispositions of a large portion of the people, and we are sure that no one, who has the prosperity of our commonwealth at heart, can hesitate respecting the course before him.

It is gratifying to state that the demand for the GENTLEMAN'S VADE MECUM, or Sporting and Dramatic Companion, has increased so rapidly since the first of the year, when it appeared in a beautiful change of dress, that the publisher has been induced to reprint several of the preceding numbers, to enable him to furnish new subscribers from the first of the present volume. Many who were unable to get the work before, may now be supplied. This well conducted publication deserves to be paid for promptly in advance, as the expenses of prosecuting it in its present improved form, we are certain, will not leave much profit to the proprietors.—*Salmagundi*.

A large and beautiful white sheet, imperial size filled on both sides with humorous and costly engravings, will be published every quarter, as a supplement to the SALMAGUNDI. It will be furnished *gratis* to all new subscribers to the GENTLEMAN'S VADE MECUM, or THE MODERN ACTING DRAMA, and to all the old subscribers of these works who forward their subscriptions, for the present year, in advance, without further solicitation.—*Salmagundi*.

Mr. Noah Frisbie's mammoth hog, raised at Litchfield, Conn. and recently killed at Hartford, weighed 882 pounds and was but two years and three months old.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,.....	bushel.	2 50	—
CATTLE, on the hoof,.....	100lbs.	5 00	6 00
CORN, yellow,.....	bushel.	new	76a78
White,.....	"	do	76a78
COTTON, Virginia,.....	pound.	18½	—
North Carolina,.....	"	—	—
Upland,.....	"	18½	20
FEATHERS,.....	pound.	37	40
FLAXSEED,.....	bushel.	1 25	1 37
FLOUR&MEAL—Best wh. wh't fam.	barrel.	7 75	8 25
Do. do. baker's,.....	"	7 25	7 75
Do. do. Superfine,.....	"	7 00	—
SuperHow. st. in good de'd	"	6 75	6 87
" " wagon price,.....	"	6 62	6 75
City Mills, extra,.....	"	6 87	7 00
Do.	"	6 87	—
Susquehanna, firm&scarce	"	6 75	—
Rye,.....	"	5 00	5 25
Kiln-dried Meal, in hhds.	hhd.	19 50	20 00
do. in bbls.	bbl.	4 37	4 50
GRASS SEEDS, red Clover,.....	bushel.	5 00	5 75
Timothy (herds of the north)	"	2 75	3 25
Orchard,.....	"	2 25	3 00
Tall meadow Oat,.....	"	2 00	2 50
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.	—	15 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	8
HOGS, on the hoof,.....	100lb.	7 00	7 50
Slaughtered,.....	"	7 00	7 50
HOPS—first sort,.....	pound.	12½	—
second,.....	"	10	—
refuse,.....	"	8	—
LIME,.....	bushel.	33	35
MUSTARD SEED, Domestic,.....	"	5 00	6 00
OATS,.....	"	42	45
PEAS, red eye,.....	bushel.	—	—
Black eye,.....	"	—	1 25
Lady,.....	"	—	—
PLASTER PARIS, in the stone,.....	ton.	—	5 50
Ground,.....	barrel.	1 25	—
PALMA CHRISTA BEAN,.....	bushel.	2 00	—
RAGE,.....	pound.	3	4
RYE,.....	bushel.	88	90
Susquehanna,.....	"	none	—
TOBACCO, crop, common,.....	100 lbs	5 00	5 50
" brown and red,....	"	5 00	7 00
" fine red,.....	"	7 00	9 00
" wrappery, suitable	"	—	—
for segars,.....	"	5 00	10 00
" yellow and red,....	"	6 00	8 00
" good yellow,....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"	4 75	5 00
" ground leaf, ..	"	5 00	8 00
Virginia,.....	"	6 00	—
Rappahannock,.....	"	—	—
Kentucky,.....	"	8 00	14 00
WHEAT, white,.....	bushel.	1 45	1 50
Red,.....	"	1 35	1 45
WHISKEY, 1st pf. in bbls.....	gallon.	37	37½
" in hhds.....	"	33½	—
" wagon price,.....	"	30	bbls
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	1 50	—
To Wheeling,.....	"	1 75	—
WOOL, Prime & Saxon Fleeces, ..	pound.	55 to 63	30 32
Full Merino,.....	"	48 53	23 30
Three fourths Merino,.....	"	45 48	26 28
One half do.....	"	40 45	24 26
Common & one fourth Meri.	"	36 40	22 24
Pulled,.....	"	38 40	23 24

FOR SALE.

A DURHAM Short-horn bull 15-16 blood. He is from a fine cow and got by Col. Powell's celebrated bull *Monk*—now two years old. Price, delivered at York, Pa., \$130.

Letters addressed to the editor post paid, will be attended to. nov 10 2t

FIELD SEEDS.

NEW AND RARE SORTS.

THE Subscriber is just receiving ADDITIONAL SUPPLIES of European and other FIELD SEEDS, among which are many NEW and RARE KINDS, and well adapted to suit the MIDDLE and SOUTHERN STATES, viz:

PERENNIAL and ITALIAN RYE GRASS, these grasses, particularly the former, are extensively cultivated in Europe, are generally mixed with clover; fine pasture, rich moist meadow land suits them best. Sow 1 bushel to an acre.

SAINFOIN or ESPERSETT, particularly adapted to a calcareous or chalky soil, considered in England, one of the most valuable plants: farmers not possessing calcareous soils, may succeed with this grass by dressing their lands with clay marl. This grass would no doubt flourish well in our most southern states.—3 to 4 bushels of seed should be sown per acre.

FIELD BURNETT, this grass is well suited for sowing on high, gravelly soils; fine sheep pasture—sow 2 bushels per acre.

SCARLET CLOVER, or TREFOIL—*Trifolium Incarnatum*. A valuable early grass, and fine for soiling in summer, or supplying food when other grasses are winter killed. If sown in the fall it can be cut three weeks earlier than common clover, or if sown in the months of April, 50 days after sowing. From its rapid growth it is likely to become a valuable acquisition to the farmer—20lbs. is required to seed one acre. Also for sale a few pounds **YELLOW TREFOIL**.

WHITE DUTCH CLOVER.—Fine pasture, and for lawns. Its increase is very much facilitated by a top dressing of ashes—sow half peck per acre.

BLUE GRASS, GREEN GRASS, &c.—Suitable for forming fine green swards, and sometimes sown for pasture, and on meadow land—sow 1 to 2 bushels per acre.

SWEET SCENTED VERNAL GRASS.—Particularly valuable for pasture, very early; proper situation well drained meadow land.

MILLET.—The stalk of this plant resembles those of Indian corn, though much smaller, principally valuable for green fodder, 2 good crops can be raised during the season, the first to be sown about the 20th May, on a rich light soil—half a bushel of seed should be sown per acre, if fodder is the object, and less if for seed.

ENGLISH & POLAND OATS—several sorts weighing 44 lbs. per bushel, cultivated as the common kinds.

SKINLESS OATS.—The grain naked like wheat, should be sown about 15th April. A product of 80 bushels, is said can be produced from one acre, and each bushel is worth three times more than the common oats—price 50 cts. per lb.

SPRING & WINTER VETCHES or TARES.

LUCERNE or FRENCH CLOVER.—Very valuable, especially for soiling, bears cutting several times during summer, requires a deep rich loam, not wet. Stands the severest winters, and drought does not effect it—20 lbs. is sufficient to seed one acre, if sown broad cast—half a bushel of rye or oats if sown with 20 lbs. of seed will effectually protect the tender plants from weeds.—See Am. Farmer.

GAMA GRASS.—This last but not least in value, is a strong coarse grass, indigenous to all the Southern States, but has been but partially cultivated, its product is immense. Animals eat it with avidity. An ounce of seed which contains 260 kernels, will by being planted and subdivided three seasons in succession, enable the culturist to set out a meadow of 53 1-2 acres, which will last him an age—price 50 cts. per ounce.

ALSO

MANGOLD WURZEL, or large pale red Beet; **RUTA BAGA**; **LARGE YELLOW TURNIP**; **ROUND & LONG CROOKED PUMPKIN**; **FIELD PEAS and BEANS**; **COW CABBAGE**, or *Cacaen-nam Kale*, a fine green fodder for cattle; **Altringham Carrot**; **MERCER, EARLY KIDNEY & EARLY ROUND POTATOES**.

For sale by **R. SINCLAIR, Jr.**
fe 23 Light, near Pratt st.

CONTENTS OF THIS NUMBER.

Progress of the silk business—notice of Sir John Sinclair's death—remarks on the propriety of multiplying the morus multicaulis by seed—account of a great corn crop—experiments made with transplanting the ribbon grass in marshes—product of mulberry foliage—R. K. Meade's letter on his breed of sheep—an interesting paper on the Dahlia by professor Russell—account of a substitute for the spade—silk made by Dr. Marcy—a singular tree—a cure for worms in the head of sheep—emigration from Virginia—notice of the Gentleman's Vade Mecum—a mammoth hog—prices current, advertisements, &c.



TREES—SEEDS, &c.

100 LBS. White Italian Mulberry Seed, direct from the most celebrated Silk Districts in Italy.
75 lbs. White Mulberry Seed of American growth.
60,000 Chinese Mulberry cuttings perfectly prepared for planting.

2,500 Chinese Mulberries, of large size, 900 of which are inoculated on the white mulberry, which gives them additional hardihood—price \$50 per 100.

These trees were planted in an orchard which it is necessary now to remove.

35,000 Chinese Mulberries of the usual sizes at \$25 to \$30 per 100, and some of larger sizes, at \$37 per 100.

Fruit and Ornamental trees, Green-house Plants, Roses, Bulbous roots, &c. The collection of which is unrivalled, and priced Catalogues of which will be sent to every applicant. Double Dahlias above 500 most splendid varieties, and comprising 200 very rare and superb kinds not to be found elsewhere in the Union.

Garden, agricultural, and flower seeds—an immense collection comprising all the new and rare varieties of vegetables, &c., as will be seen by the catalogue.

20 bushels of the celebrated chevalier Barley.
1,000 lbs. Early Crimson Clover, or *Trifolium Incarnatum*.

2,000 lbs. White Dutch Clover,
20 bushels Talavera wheat.

10 do Venetian do
100 do Early August and Hopetown oats, the latter weighing 44 lbs. per bushel.

160 do Orchard Grass seed.
75 do Tall meadow oats grass.

30 do Italian Rye grass (very valuable).
100 do Facey's perennial rye grass.

2,000 lbs. Finest Provence Lucerne.
20 bushels new white Field Beans, (very productive).
300 bushels early Nonpareil, Saccharine Pink Eye.

Taylor's Forty-fold and other celebrated Potatoes.
25 bushels Potato Onions.
Also, Field Bernet, St. Foin or Esparcette, Large Riga Flax, Lentiles, Vetches, Millet, Yellow Clover—a superior large variety of Teazel—2 varieties of Castor Oil—Bean, Weld, Wood, Madder, &c.

Orders sent direct per mail will receive immediate attention, and seeds in quantity will be supplied at very moderate rates.

WM. PRINCE & SONS,

Linnaean Botanic Garden & Nurseries, Flushing near N. Y.
Feb. 23 2t

GAMA GRASS SEED.

JUST received, a fresh supply of Gama Grass Seed. This is the grass that bears cutting every 15 days for soiling, and every thirty days for hay, from the middle of May till frost, say till the middle of November, and has yielded at the rate of 64 tons to the acre under peculiarly favorable circumstances, and from an acre of which 30 tons may be calculated upon. The earlier it is sown in the spring the better.

ROBERT SINCLAIR, Jr.

Maryland Agricultural Repository, Light near Pratt street.
feb 9

DEVON STOCK.

THE editor of the Farmer and Gardener can at all times supply orders for Devon Cattle. This breed is so distinguished for their easy keep and docility; the richness of the milk of the cows, and for the activity and sprightliness of the oxen, that they would be admirably suited to the purposes of southern agriculturists.

The happy adaptation of the *Devonshire Oxen*, for the purposes of the farm, will be understood, when it is stated that 4 oxen have been known to plough 2 acres of ground in a day, and a team of them to trot at the rate of six miles an hour with an empty wagon.

Any person wishing to procure them can be supplied by addressing a letter post paid to the editor of the Farmer and Gardener.
nov 10 4t

SHEEP AND CATTLE.

THE Editor of the Farmer and Gardener, Baltimore, is authorised to sell a part of the stock of **SHEEP & COWS** of John Barney, Esq. so well known as a successful breeder, while he resided at Fort Penn, Del. The Sheep are of the Bakewell breed, and he has been particular to keep up their purity and integrity of constitution, by periodical importations of rams to prevent the evil consequences of breeding in and in. The price is \$50 for rams and \$25 for ewes. Ewes with lambs by their side, deliverable first of April, \$35.

Among the rams there is a most splendid animal, imported by Mr. Barney from England, the sire of many of his yearlings—his price is \$100.

His Cows consist of about 20 in number, and have been bred for their fine dairy qualities. They are large sized and all deep milkers. There are among them 7-8 and 3-4 Durhams, Durhams and Devons, Durhams & Simms' imported breed, and crosses with a favorite French bull imported some years since by the late Stephen Girard, esq. The price of these cows are \$100 each.

To those who are acquainted with the reputation of Mr. Barney as a breeder and grazier, it is unnecessary to add any thing in favor of his stock; but to those who may be unacquainted with him, it may be proper to observe that his great pride with respect to his sheep, has been to combine weight of carcass with yield of fleece, and that his object with his cows has always been, to breed for size and deep milking, and that thirty years' experience has not been lost upon a gentleman of his close and acute observation.

All letters upon the subject must be post paid. feb 9

FOR SALE ON MODERATE TERMS.

THE editor of the Farmer and Gardener has for sale two most beautiful Devonshire Bulls, rising three years of age each, of pure and celebrated blood. Also, one Bull 4 years old, a cross between a full bred Durham bull and a pure Devon cow. This noble animal combines in a remarkable degree the good points of both breeds. To gentlemen of the south who may desire to improve their stocks of cattle, the present is an opportunity rarely to be met with. All letters to the editor upon the subject must be post paid. do 29 4t

A BROOD MARE FOR SALE.

A SUBSCRIBER in Virginia writes to us as follows:

"I have a considerable stock of Blood Horses on hand, which would allow me to spare a Brood Mare, by the celebrated *Contention*. Should any gentleman wish to breed from any of the imported or other horses in the south, it would afford a fine opportunity to purchase her and have her served before taking her to the north. She is young, has brought two colts, and can be accompanied by well authenticated testimonials of pedigree, as her sire is well known, and her dam was once owned by Col. Wm. R. Johnson."

Any person desirous of purchasing a Brood Mare of the above description, can be supplied by addressing a letter to the Editor of the Farmer and Gardener—post paid.
Feb. 16. 4t

TO AGRICULTURISTS—The analysis of Soils, Manure, mineral waters, and other productions, interesting to those engaged in Agricultural pursuits, is performed with promptness and accuracy, by

3t **TYSON & FISHER, Chemists,**
Druggists, No. 192 Market street, Baltimore.

STOCK OF IMPROVED SHORT HORN DURHAM.

THE editor of the Farmer and Gardener, Baltimore, has for sale two 7-8 and four 3-4 bred cows, 2 full bred and seven 7-8 bred bulls of the improved short-horn breed. They are all fine animals whether regard be had to their milking or fattening propensities. Their pedigrees are indisputable, all tracing to the British Herd book. They will be sold low for cash, their excellence being considered. To any person, company, or society, who may want several, a great bargain would be given.

Letters addressed to the editor upon this subject, must be post paid. nov 10 4t

WHITE TURKEYS.

A few pair of White Turkeys would be purchased at the Agricultural Repository in Light near Pratt street, by
de 29 **ROBERT SINCLAIR Jr.**
3t.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. F. ROBERTS.

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BALTIMORE, MD. MARCH 1, 1836.

Vol. II

THIS publication is the successor of the late AMERICAN FARMER.

and is published at the office, on the west side of Light, near Pratt street, at five dollars per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, MARCH 1, 1836.

The engraving of a mansion for a farmer in moderate circumstances, which is placed on another page, will be found to be worthy of attention. The house is admirably contrived to promote the convenience and comfort of a family, and has that to recommend it which should make it "friends at court"—it can be built at a comparatively trifling expense.

THE VIRGINIA CORN AND COB CRUSHER AND GRINDER.

We were called upon a few days since by the inventor of the above machine, Mr. Jas. C. Baldwin, of Virginia, to witness its operation, and so far as we could form an opinion from a single performance, we were gratified with it. It very readily converted the corn and cob into a substance nearly as fine as bran. The cob so completely crushed with the common mass as to present very few angular particles, and we are compelled to say that we think the machine worthy of the attention of agriculturists generally. It would appear almost a work of supererogation to dwell upon the advantages to result from the conversion of the cob into a substance which will prove not only edible but digestible, and particularly as there have been mills for this purpose in existence for many years, and more or less approved of by farmers and planters of distinction. A thing so obvious in itself, it would seem ought not to require argument to enforce it; but such is the force of habit, and such the indomitable tendency of prejudice, that even at this day the utility of feeding the cob in this form is but partially known and less adopted, and upon many estates the cobs of corn are only used as food for the cow when other provender is scarce and difficult to be procured. Of its nutritive properties no one who has ever tasted it, while eating the corn off it as roasting ears, will entertain the least

doubt; for its sweet and highly sugary flavor must have convinced him that it not only contains the principle of nutrition, but possesses it in an eminent degree; but it may be said that the sugary taste is not always the test of the alimentary properties of a substance as it is often met with in bodies decidedly poisonous; this is most true; but we affirm without the fear of contradiction, that where we find it in a body known to be perfectly innoxious, as is the corn cob, we have a right to conclude that it does contain nutrition. The question then, which we have to determine is, which is the best method of feeding with the cob? The answer is at hand:—that in which it is easiest digested in the stomach of the animal. But speculation aside: let us resort to the results of experiments, these being the safest guides in a matter of this kind.

P. Minor, Esquire, in a very interesting paper addressed to General Cocks, vice-president of the Agricultural Society of Albemarle, gives the result of a minute experiment made to test the relative nutritive strength of the cob and the corn by distillation. It was, says Mr. Minor, carried on under the eye of an experienced and intelligent distiller, and was as follows:—He took ten bushels of the corn and cob, weighing 367 lbs., and ten bushels of pure corn meal, which weighed 400 lbs. They were both brewed or mashed on the same day and distilled separately, with great care and accuracy. The product of the pure corn was 18 gallons, and that of the mixture, or corn and cob, was 13 gallons of spirit, each of the same degree of proof. "Now," observes Mr. Minor, "it is generally agreed that the cob constitutes about one-half of the bulk of corn; in other words, we give two measures in the ears for one shelled, and the cobs are either used as fuel or thrown away as of no value." If this were true, the product of the mixture then, should have been only 9 gallons, which is the half of what the pure corn produced. But 13 were obtained, four of which must have been, of course, extracted from the cobs; or if we estimate its nutritive power by the quantity of spirit, it is clear, that whenever we shell ten bushels of corn, and throw away the cobs, we throw away a portion of food, equal to the difference between 9 and 13, or nearly one-half.

As it relates to the respective weight of each, the difference in favor of the mixture is still greater, the pure meal being more than three pounds heavier in the bushel; and I am inclined to think that the product of the mixture, would have been greater, if the experiment had been made earlier in the year, before the cobs had lost much of their substance by evaporation. This experiment was not made till the month of March. The distiller mentioned an important fact that occurred in the process. He found that the fermentation of the mixture took place much sooner, and was perfected a day or two earlier than the other. His expression was, that it mashed much easier, and better than any thing he had tried before, and which he accounted for by supposing that the particles of the cob being lighter and coarser than those of the grain, but mixed together, prevented too close and heavy a deposition of the mass at the bottom of his brewing tub.

"We are," says our authority, "aware that the saccharine particles, or those yielding spirits, are not the only constituents of nourishment. We know that oily and mucilaginous particles are also component and necessary parts of food. But which preponderates, or in what proportion to each other, they are required to exist, in order to constitute a healthy food I do not pretend to know. It is certain, however, that the two latter do exist, in some degree, in the cobs of corn; and since the experience of all who have tried concur in reporting it to be the most healthy mode of feeding corn, perhaps it will not be unfair to infer, that they maintain a due and proper proportion to the spirit. If so, the experiment must be satisfactory, and the conclusion I have drawn from it undeniable."

"But besides the actual economy, there is another advantage in this way of feeding corn, which ought to engage the attention of every farmer. It is notoriously true, that the unground grain of corn is heating to the stomach of all animals and of difficult digestion, producing cholic, and other inflammatory disorders, particularly in horses, which tend greatly to shorten their lives. They are deprived of the benefits derived from the stimulus of distension, (so necessary to the proper health of animals,) by being unable to eat a sufficient bulk to produce it before they become gorg-

ed. But when ground into meal, along with the cobs, and mixed with cut hay or straw of any kind, this necessary distension is produced, without any danger of disorders arising from eating too much. It is now eight years since I have been in the habit of feeding corn in this way, and out of six to ten horses, which I have annually kept in that time, there has been but one case of sickness among them, which was a slight cholera. Indeed since I have lived in this country, which is now eleven years, there has been but one death among that description of stock on my plantation, and that occurred to a mare with a young foal, in a distant cloverfield, without having been fed for many weeks, and which took place two or three days before it was known; this uncommon health of my horses, I attribute in a great degree to the use of ground food."

Mr. Minor's observation that "we are aware that the saccharine particles or those yielding spirits, are not the only constituents of nourishment" of the cobs and corn, is true, and he might have demonstrated its truth by a fact familiar to almost every one in the vicinity of distilleries and breweries, where the slop and grains are daily fed to both cows and swine with decided advantage to the quantity of milk and increase of fat of the animals respectively.

Mr. Robert White, of Shrewsbury, New Jersey, in a letter to Judge Buel, remarks:

"A pretty extensive feeder for the Philadelphia market once told me, that a bushel of meal made of corn and cobs was quite equal to a bushel of meal made of corn and oats, that his cattle thrived as fast on the former, and that they never stalled (cloyed) on it."

Mackenzie, an eminent Scotch authority, in speaking of ground food asserts that it is nearly a saving of one half to feed grain in that form.

Judge Buel in commenting on the subject, observes:

"We have abundant testimony, in the practice of eminent farmers, of the utility of feeding cob-meal to animals always mixed, we believe, with meal of corn or oats. Cob and corn meal is improved by scalding, still more for hogs; and by boiling, with potatoes, apples and pumpkins, and yet more by a partial fermentation. All these preparations facilitate digestion. An animal high fed with raw grain, whether horse, hog or ox, voids much of its food in an undigested state, which is of course lost for all beneficial purposes. Grinding grain for animal food, therefore, is universally admitted to be economical, and cooking and partially fermenting it, it is no less true, further enhances its value for swine. Even the water in which it is cooked augments its nutritious properties, in consequence, probably, of some chemical change affected by the boiling operation. Fish subsist in pure water, as is strik-

ingly illustrated in the management of the gold fish. In giving cob-meal to horses and neat cattle that are fed with cut hay or straw, there is an undoubted advantage, at least so it is stated by those who are well experienced in feeding the grain and hay together. The grain, especially corn, is sometimes too heating to horses, and this tendency is counteracted by the stimulus of distension, afforded by the hay and straw. Mixed feed of this sort may be fed thrice in 24 hours. It is eaten in so short a time as to afford much beneficial rest to the animal. We would call the reader's attention to the facts stated in Mr. White's postscript."

The Rev. H. Colman, of Massachusetts, who is a practical and scientific farmer, in giving his experiments in fattening swine, states this important fact, illustrative not only of the superiority of ground food for that animal, but of boiling it.

"At first," says this nice observer, "we employed half a bushel of Indian meal to make a kettle full of hasty pudding; but we soon found that a peck of meal by taking up all the water it could be made to absorb, in a thorough boiling, would make the same kettle full (holding five pails) of sufficient consistency."

We could multiply authorities out of number, but it is useless, those which we have given are sufficient to show how essential it is for the farmers to husband their corn cobs, and what an immense saving it would prove to them to convert them into meal, to be used with their grain. Every one who will give to this subject the proper attention, will perceive that with the aid of one of these Corn Crushers, he might sell at least forty-five per cent. more corn and keep his stock in fully as good condition as he now does. Indeed, we are of opinion that cattle and horses upon the same quantity of food would get fat in one-third less time than they now do. But so far as our judgment goes, we are of opinion that the business of the careful farmer is only half performed, when he reduces his grain and cobs to meal; if he wishes to carry out his economy, he should either steam or boil his food, and mix it with cut straw, hay, fodder or corn stalks.

We had forgotten to mention that we had seen some oats broken in the same mill, which we think were greatly improved by the process. We understand one of our most experienced tavern-keepers, is of opinion, that by breaking the oats, fully 33 1-3 per cent. is gained by the operation. If so, this machine will subserve another valuable purpose.

We will mention an important fact connected with this crusher:—from the facility with which it can be worked by *hand-power*, its value is greatly enhanced to many farmers who cannot meet the expense of motive-machinery—that by

hand power it is competent to crush from 4 to 6 bushels of cobs and corn in an hour. This must be of vast importance to that description of farmers whom we have named, nor will it be less so to the gentleman of more ample means, for *economy*, liberal and enlightened economy, is equally as commendable in the rich as in the poor, but to those who would desire to apply horse-power to it, we would remark, that its capacity can be thus increased to from 15 to 20 bushels an hour.

RATS.

A gentleman from the south a few days since, assured us that in less than nine months, upwards of 8,000 of these destructive vermin had been killed on his estate, but that such was the rapidity of their increase, that their depredations remained unchecked. They had literally destroyed a large house for him, and so serious were their ravages that every wet day his hands were occupied in rat killing, and that, although he had a large number of valuable terriers and other dogs, the enemy still maintains his supremacy, and defies all attempts to remove him from his fastnesses. He has tried the various poisons recommended, without deriving any essential benefit from them, and at one time, procured thirty or forty cats; but these after battling for a few weeks, were either killed up or driven off by the rats. Thus situated it may readily be supposed he is solicitous for such information as would enable him to get rid of his bad tenants. Can any of our readers inform us how they may be destroyed or driven off?

WORK FOR MARCH. ON THE FARM.

The month which has just closed its career of cold and storms, seemed determined that this daughter of Æolus should not be indebted to her for any favors, for her almost expiring efforts were spent in clothing the earth with a body of snow that would seem to defy the exertions and enterprise of the husbandman and the horticulturist, for many days, in this part of our country at least. But if nothing in the open field can as yet be done *here*, there are other parts of our wide spread territory and variant climate, where the plough and the spade has, weeks since, been busy in laying the ground work of early crops. But even here, the farmer must begin to bestir himself in preparation for the labors of the opening season. His implements of husbandry must all, without further delay, be examined, and those which need it be put in order; it is no time when you have *use* for a thing to be obliged to send it

for repairs; the agriculturist should always be in advance of his business.

Clover. This month the farmer will recollect is the general time for sowing the seed of this great improver of the soil. The practice among most farmers, is to sow it upon the snow, if there be any, as they are thus enabled to do it more regularly and to give a more uniform appearance to the field, the which if no other advantage were to be gained by it, would of itself be of sufficient importance to render it an object worthy of every consideration; but another and most desirable point is gained; by regular sowing you keep out pernicious weeds. A fault we consider is often committed in being too sparing of the seed: many persons sow but six to eight quarts to the acre; this, if no other grass be grown in the field is entirely too small a quantity: less than twelve quarts should never be sown on an acre, and even that under particular circumstances might be increased from two to four quarts without injury, if not with decided advantage. The idea that the earth cannot support it if "too thick," is absurd: but where shall we fix the standard, to sow beyond which, is "too thick?"—the term is entirely too indefinite, and means really nothing which can be applied successfully to the purposes of husbandry. There is little soil, indeed, that will not if left alone cover its surface with some species of vegetation or other; and there is no land that will grow clover at all, but will support a full crop. But suppose we sow the seed sparingly and leave unoccupied spaces, do you presume that they will remain *bald*? If you do, you are egregiously mistaken. The earth is no idler, and whenever it possesses the principle of vitality it will exert it to the utmost of its strength. Then if these unseeded places are to be filled with weeds, we would ask, would it not be infinitely preferable to have them employed in growing healthful stalks of clover than to remain nurseries for the generation of all that is foul and useless in vegetation? Cover the entire ground with the grass intended to be grown for pasture or hay, and you keep out those intruders which, if left to their own will, will ultimately destroy your fields for either one purpose or the other.

Irish Potatoes. As soon as you can in this month you should plant your *early* potatoes. It is at all times difficult to prescribe the precise time when to plant them. The old day allotted to this work among gardeners, used to be the 17th day of March; but as we have before premised, circumstances must regulate the *precise time*. The 17th of March might be too early one season and too late another. Whenever the frost is out of the ground, is, in our estimation, the proper period to plant your potatoes. The ground it is presumed destined for your potato patch, was thrown into fallow last fall; if so, you must harrow through it as soon as the ground is in a state to allow of it, then with your plough turn up trenches two and a half feet apart, in the bottom of these place your long manure with a liberal hand, and then plant your sets of potatoes at the distance of about nine inches asunder; then cover them over, and should the weather remain mild you need not trouble them till the plants are about six or eight inches high, when they should be worked. The subsequent cultivation will, of

course, be regulated by the condition of the plants. Should the cultivator prefer the hill form, the hills should be two and a half feet equi-distant, and may be very easily made in the following manner, presuming that the ground is already ploughed, harrowed, &c. Drop your long manure at the proper distances, so as to form a base of the desired size of your hills, then drop your potato sets and draw the earth over the whole about four inches deep; as they may require hoeing subsequently, the earth must be drawn up, so that by the time you have completed working them the hills will be of sufficient size. In the selection of the seed the earliest kinds will of course be taken.

The manure, as soon as the season will admit of it, must be hauled out and dropped in place; and your Clover fields should receive a top dressing of plaister of paris, and if you have the articles within convenient reach, they would derive great advantage from an additional top dressing of lime or marl.

Towards the latter part of the month you should get in your oats.

If you neglected pruning your fruit trees in January and February, you should do so as *early* in this month as possible, taking care to make the surface of the stump smooth, and apply the composition, made as we directed in February. But let us again admonish you not to *trim* except when needed; broken limbs must all be taken off with care, and defended from the weather as we have prescribed; but there is a prevailing disposition in many to prune too closely, under the mistaken notion that *nature* needs a great deal of assistance, when in fact she is quite as wise as most philosophers, and if permitted to travel her own road, will do much better than if officiously obtruded upon.

While pruning your trees you should not forget that the worm which may destroy your fruit is beneath your tread, and that the *then time* is the propitious one to kill the enemy. If the earth for four or five feet in circumference around the trees, and as many inches in depth, could be scraped up and submitted to the action of fire, death would be the inevitable doom of those destructive miscreants. If that be impracticable, a gutter of tar around the tree near the earth will be found serviceable; in addition to which, let the trunk and body of the tree be well rubbed with a hard hickory broom, and then lay on with a painter's brush a mixture of Seneca oil, Scotch snuff and sulphur, in the following proportions:—half a gallon of oil, quarter of a pound of Scotch snuff, and two ounces of the flower of sulphur.

Plant out your young trees and cuttings of all kinds as soon as the frost is out of the earth.

If you have not done so before, you may prune your grape vines in the *early* part of the month; but do not delay it too long, as by so doing you may endanger the vines and run a risk of bleeding them to death.

As soon as the sap begins to rise *stir* the earth around the roots, and give a slight dressing of ashes and good mould.

Recollect that this is the month your *cows* and *ewes* will be giving birth to their young, and that they therefore require additional attention and care. Give both extra quantities of good nourishing food, and be careful as they approach the

crisis of their labor, to keep them where they will not be disturbed by other animals. And as the season has approached when your demand upon the labor of your horses, mules and oxen, is greatly increased, recollect that if you desire them to do you good service, you should feed them well; no man ever yet lost any thing by feeding his beasts of burden with a generous hand, and that humanity, one of the most beautiful attributes of our species, would teach us to be kind to those whom Providence, in his wisdom, has placed under our controul.

IN THE KITCHEN GARDEN.

Asparagus.—Towards the latter part of this month you should dig and fork your asparagus beds, to do which you should have a fork, with 3 tines about 6 or 8 inches long, or if you have not such an implement, the common dung-fork will answer as a tolerable good substitute.

In forking the beds, which is absolutely to be done every spring, you must avoid going so deep as to injure the crowns of the plants. As soon as the beds are forked they must be raked smooth.

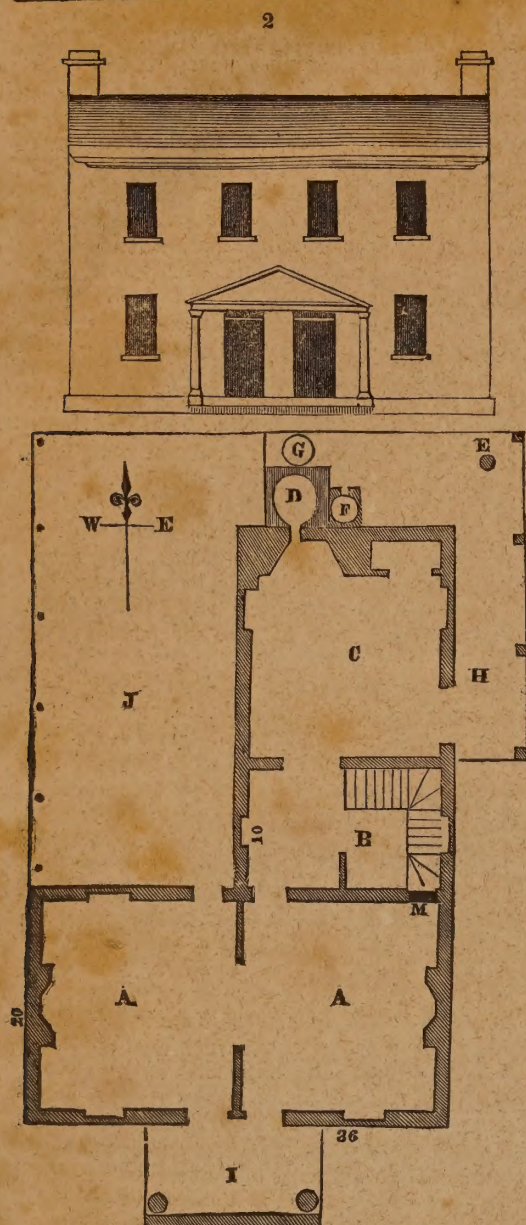
This also is the proper time for the transplantation of asparagus beds as also for sowing the seed.

Cauliflower plants and **cabbage** plants that were sown last month, must be attended to; the former transplanted in hot beds slightly made and the latter inured to the air, so as to be ready for setting out as soon as the weather becomes settled. Your *peas*, windsor beans, lettuce, carrots, parsnips, small sallading, radishes, spinach celery, broccoli, beet seed, onion seed, early turnips, and indeed almost every other kind of early vegetables, should be sown as soon as the weather gets settled. And if you desire a succession of fresh peas, beans, lettuce, radishes, &c. you should sow small beds of them every two weeks.

Rhubarb.—This delicious and healthful plant should be in the garden of every one, and yet such is the difficulty of getting folks out of the old beaten track, that it is by no means generally cultivated. It makes as good a tart as the gooseberry, is much easier prepared, and is one of the best preventives of the affections of the bowels to which children are subjected that is known. A gentleman of our acquaintance assured us some months since that daughter of his had been cured of a long standing intestinal disease by the use of this vegetable alone.

The following is the mode of culture:—Select a piece of rich sandy loam, manure it well, trench it two or three spades deep, then level the top with a rake, lay it off in squares of 4 feet, at the intersections of which sow your seed in drills about eight inches apart; keep them weeded and watered during the summer. These will be fit to plant out the next spring, and should be protected through the winter. If the weather should prove severe during the spring that the seed is planted, the plants should be covered by a board so placed as to protect them from frost, while it would admit light and air freely.

Large Hogs.—Mr. Sanford R. Benson, of Easton, Penn. recently slaughtered six hogs, which weighed as follows: 703, 628, 540, 388, 372, 342; total, 2973. Mr. B. sold the same for \$7.75 cash, per hundred, thus pocketing \$230 40 cents.—*Buffalo Republican*.



TO THE PATRONS OF THE FARMER AND GARDENER.

I respectfully submit the above plan of a dwelling House for such proprietors of small landed estates, and others, as conduct their farm operations both in the house and out of it with but few servants. My object in planning it has been to consult convenience and comfort, and to present at once a compact, cheap, and commodious house; the last term is used relatively to the expense of the building. Nor have I been indifferent to the accommodation of the good housewife. She may, without the least discomfort to herself, attend personally to all her domestic arrangements from the parlor to the kitchen, a thing not to be rejected or held lightly by those who would desire to see their affairs managed with frugality; for say what you may, unless the eyes of the female head of a family are directed towards every part

of her domicile, things will go on but indifferently well.

With these preliminary remarks I will proceed to give the *explanation* of the *plan*, and shall accompany it with such observations and illustrations, as a proper understanding of it may appear to render necessary.

No. 1. A ground plan.

2. The elevation of the house.

AA. Two parlors 17 by 15½ feet with a partition between them so arranged as to slide back into casements, converting the two rooms into one, of the dimension of 17 by 31 feet, which will be both commodious and elegant, to have well finished fire-places at each end.

The two front doors leading into the above parlors, may seem at first view to be novel; but as economy and convenience in building is what I am aiming at, I trust my reasons will prove satisfactory. By having *two* front doors, an eight feet passage, expensive staircase, and partition, are rendered altogether unnecessary. The two parlors are thus brought near together, which every good and experienced housekeeper will acknowledge to be a great advantage; but the greatest convenience is, the ability thus provided for, of throwing the two parlors into one spacious apartment, capable of entertaining a large company.

B. A pantry or store room and china-closet between the dining room and kitchen. In this space, also, there is a good, plain, substantial and cheap staircase, so arranged as to answer for the front house.

C. The kitchen 14 by 16 feet.

D. A bake-oven sufficient to answer all the purposes of the family, being large enough to enable the lady of the house to have her baking of all descriptions done twice a week, a matter of importance when time is of value, and infinitely preferable to the custom too prevalent in many families of making their bread daily.

E. A pump of water in a corner of the porch; thus bringing this article so essential to health and cleanliness within the immediate reach of the servants, and economising both time and labor.

F. A boiler, whose flue is so constructed as to conduct the smoke up the kitchen chimney. I need not speak of the convenience of this arrangement; it is too well understood by every lady at the head of a family—each of whom we feel assured will thank me for being thus attentive to her laundry.

G. A lie-hopper.

H. A large porch, where, if necessary in summer, the family may eat their meals and transact other of their domestic business; thus saving the house from the accumulation of much dirt, greatly promoting its cleanliness, and husbanding both time and labor.

I. A front Portico.

M. A door from the dining room to descend into the cellar underneath the stairs. There should also be an outer cellar door near the kitchen door.

J. A grass yard, enclosed with an evergreen hedge, which, as well as being highly ornamental, will be useful in defending the house from the

cold north west winds. It would greatly add to its beauty and effect, if the grass-plot were tastefully planted with a well selected assortment of flowers and flowering shrubs, so that a succession of bloom might be secured through the spring, fall, and summer.

With respect to the other conveniences of the farm, I will make a few remarks. The barn and out buildings ought to be east or north of the dwelling. In the immediate vicinity of the house there should be a good spring of water, near which the milkhouse should be located. Without these conveniences it is impossible to have and preserve milk of prime quality, or make even tolerable butter. Proximity to the spring should be a governing object in the erection of all the buildings, as it would be desirable to have it within fifty yards of the kitchen door, and equidistant between it and the barn. The cow-yard ought to be situate near the milk-house also, as it would thereby greatly contribute towards promoting the convenience of the women in carrying the milk to the latter. Should such an establishment be considered offensive or unsightly on account of its being placed so near the dwelling, this objection can be overcome either by planting an evergreen hedge, which would add much to the appearance of the grounds at all times, and in winter serve to relieve the eye from the dreary aspect which in most situations presents itself to the view of the beholder,—or it might be concealed from the sight by a wall—either of which improvements would afford protection to the cattle from the shrewd and piercing winds which prevail at that cheerless period of the year.

In the location and arrangement of your buildings, you should recollect that it is of vital importance to the health and comfort of your stock to have an unfailing supply of wholesome water in your barn-yard. If you have a spring eligibly situated, this may be very easily secured by laying pipes so as to conduct it into a trough to be provided for the purpose, which should be placed where the cattle can drink whenever they may please. By this plan you save the time of a hand in watering them and their manure also.

Care must be observed in the construction of the barn to place it sufficiently far from the dwelling so as not to endanger its safety from fire.

There are at all times an immense body of combustible material in and about barns and stables, which make them dangerous neighbors, situated close to mansions. But then this *danger* is more or less imminent according to the *direction* the barn may be in from the house; for instance, if the barn be located in a southeast direction, from the dwelling, the dry northeast winds, which would naturally pass over its chimneys, might waft the sparks a considerable distance, and, perchance, lodge in the dry hay or straw, and thus endanger the whole property. But when built north-west from the dwelling, the effect is directly the reverse. The damp south-east winds passing over the chimneys, put out each spark as they arise; and beside this, moisture is imparted to the hay and straw also, which renders ignition more difficult. It is therefore obvious that this latter location is infinitely the safest—that it is safer to build a barn in a northwest than a southeast direction, if only half the distance. There are other points of the compass where the advan-

tage is nearly as great, but it cannot be expected that in a paper of this description I could be more minute than I have been; my object has been more to throw out useful hints and suggestions, to be improved upon by those desirous of constructing a comfortable and cheap farm house, than to enter into details for particular situations, even if it were practicable to do so, but from the very nature of things it is not; for it is impossible for me to lay down rules to apply to localities that I have never seen, except in this general way.

ROBERT SINCLAIR.

CULTIVATION OF FRUIT.

As to the matter of profit, I would inquire in what manner an acre of ground, in the ordinary course of cultivation, can be made so profitable as in the cultivation of fruits. Good fruits will always find a good and ready market. After the trees are set out the ground may be cultivated for many years, with little or no injury to the crop, and with great benefit to the trees. The trees, themselves will require little other labor than pruning, and this requires one day annually. If the fruit be judiciously selected it would sell in the market for more than the whole crop of corn, potatoes or grain, and pay for gathering and marketing. Even in the Newburyport market, good peaches will bring from three to four dollars a bushel, cherries and plums from four to five dollars, pears from one dollar fifty cents to two dollars, and apples one dollar a bushel. Take for instance a premium crop of corn or any other grain, after deducting labor, &c. fifty dollars would be a liberal amount for profits, and yet I cannot but think an acre of good fruit would yield a profit of four times this amount.

Fruit is also one of the greatest luxuries which God, in his providence has given to man. Have you not been at the festive board loaded with all the dainties which wealth and taste could collect from this and other climes? And have you not seen that those ripened in our own sunshine have always been preferred? What foreign fruit can compare with the mellow blushing apple, the luscious pear, and the peach which fills the room with its fragrance? And yet all these we may have with very little labor and very little expense. If I am told that accidents often attend the cultivation of fruit which disappoint our expectations, I would inquire what crop of the farmer is not liable to accident? Frost, and drought, which often injure fruit, are no less injurious to the tillage crops.

Ripe fruit also contributes greatly to health. I have seldom known a family of children accustomed to the daily use of ripe fruit, who have much occasion for a physician. It prevents in both old and young, dysenteries, cholics, and various other ills which flesh is heir to, and give the form of health and strength so essential to our happiness. This is a cheap medicine; much cheaper than that presented by a physician which we must pay dearly for, and his visit beside.

Every farmer should be well acquainted with the operations of grafting and budding. It is an art attended with no difficulty and may be learned in one hour. A little practice will enable any person to perform the operations with great rapidity and success. I deem a knowledge of these simple arts so important, that I would make

the knowledge of them an essential part of a young gentleman's education.

The peach is probably the most short lived tree of all our fruit trees, but it is renewed with very little trouble. Plant a peach stone in the place where you want a tree to grow, and it is very sure to come up and flourish. The better way is, however, to have a nursery. Take a few feet of ground in the garden and in the fall plant a number of stones. At two years' growth the tree may be budded with fruit which you know to be excellent, and in the fall of the year the tree may be transplanted to the place where you wish it to stand. Let it have a southern aspect, at the south side of the house or barn, or on the south side of a hill, and it will for several years produce fruit abundantly, which will repay all your labour and trouble. When it decays let it be renewed by another. In the same manner other fruits may be produced.—*Moseley's Address.*

AGRICULTURAL SCRAPS.

Fat Hog.—Messrs. A. Underhill and Sons of this city, (says the Troy Budget,) on the 15th inst. purchased of Mr. Henry Burch, of the town of Schaghticote in this county, a hog weighing 705 pounds, and measured but six feet long, and was six feet in circumference round the body near the shoulders. He produced 84 pounds rough lard.

This is very well for Schaghticote, but she has been undone by Butternuts, in this county, for a correspondent writes us that Mr. Gifford Collins of that town, a few days since slaughtered a hog which actually weighed 750 pounds!—*Coopers-town Journal.*

Large Calf.—Mr. Isaac Newton, of this town, butchered, a short time since, a "leettle" the heaviest calf, for its age, that has ever been known in this country. When killed it wanted two days of being seven months old, and weighed, (startle not, gentle reader,) three hundred and eighty pounds. Its hide weighed 45 pounds, and its tallow 17 3-4. Beat it who can.—*Monticello Watchman.*

A stalk of buck wheat, which grew upon the farm of Mr. Wm. Long, in Warrington township, Bucks county, this season, produced the astounding number of 2613 grains.—*Poulson's Advertiser.*

Gratitude.—A very poor aged man, busied in planting and grafting an apple tree, was rudely interrupted with the following interrogation:

"Why do you plant trees, who cannot hope to eat the fruit of them?"

He raised himself up, and leaning upon his spade, replied—

"Some one planted trees for me before I was born, and I have eaten the fruit; I plant others, that the moral of gratitude may exist when I am dead and gone."—*Education Journal.*

Silk.—Where, fifty years ago, eight bales of cotton were produced, one million two hundred thousand are now produced. It is predicted that in a few years as great an amount of silk will be raised. Why not?

Good Farming.—Major Nathaniel Mowry, of Smithfield, raised on one acre of ground, the past season, one hundred and two bushels of corn.—*Providence Journal.*

[From the American Gardener's Magazine.]

CULTIVATION OF THE STRAWBERRY, WITH SOME ACCOUNT OF SEVERAL OF THE MOST ESTEEMED VARIETIES.

The strawberry, though so generally cultivated, is, however, not often seen growing in its greatest perfection. Since the introduction of the fine English kinds into our gardens, more attention has been given to this fruit; and their large size, and beautiful appearance, combined with their excellent growth, prolific bearing, and high flavor, has acquired for them a place among other desert fruit, which they so eminently deserve. Previous to the introduction of these kinds, almost the only variety cultivated in this vicinity, was that called the old wood; this is still to be seen in our markets, though not in such abundance as formerly. It is very well, if there is plenty of room in a garden, to have a small bed of the latter, as they often last till the others are all gone. But as regards any other qualification, for ourselves, we would never occupy ground for their cultivation, which could be employed in numerous ways, to a better advantage, and afford much more gratification to the owner. We have not grown this old variety for several years, having been convinced that, as a desert fruit, they were quite inferior, and if grown for the market, not yielding in comparison with the new kinds, a crop which would remunerate for the labor of picking.

There are now a large number of varieties enumerated in the nurserymen's catalogues, many of which are synonymous, and several sorts not worth growing; to make a selection from these, and to include such kinds as combine all the best qualities, is to one unacquainted with them, no easy task; we therefore, give a short description of several varieties which we have cultivated, and most of which have been selected by Mr. Thompson, of the London Horticultural Society's garden, as the best, leaving our readers to select from them such as they think the most desirable; they are all excellent, but some superior to others.

The strawberry is a native of our climate, and is to be found growing in its wild state in the pastures and fields. Mr. Knight considers all the strawberries as varieties of one species; but some botanists have distinguished them as different species.

The varieties were divided in classes, and well described by Mr. Barnet, of the Caledonian Horticultural Society of Scotland, in the *Hort. Trans.* vol. vi.; but many more kinds have since been added, and among them some of the most esteemed.

Class 1.—Scarlet Strawberries.

Old Scarlet.—Early Virginia, early scarlet, and Morissiana scarlet, of our gardens: carlate de Virginie, of the French. This is a very excellent high flavoured strawberry: it is the earliest of all the varieties, though rather a shy bearer; the fruit is middle sized, rather globular, of a very light scarlet colour; seeds deeply imbedded, flesh pale. We have grown this kind and no garden should be without it; it is perfectly hardy, and stands the winter without any protection. It is full ten days earlier than any other kind.

Grove and Scarlet, Atkinson's Scarlet, and Wilmot's early scarlet, of the catalogues. Fruit round, hemispherical, brilliant scarlet, flesh pale,

and good flavour. This variety is stated as a "first rate strawberry," in some works we have seen. We have cultivated it for two or three years, but have never produced any thing very superior. It is a good bearer and a fine fruit of fine flavour, but not very large in size; we do not think it equal to the following.

Royal Scarlet.—This name we do not find in the English works, or in the catalogues of nurserymen, except the Messrs. Prince of Long Island. What its true name is we are not aware; we first received it from Mr. Haggerston, when he carried on the vineyard at Charlestown, under the above title. The fruit is of large size, roundish, and of a bright scarlet color; seeds slightly imbedded, flavour rich; flesh pale scarlet; ripens next to the early Virginia. The foliage is strong and the fruit on rather long footstalks; stands the winter well without protection. This variety may be the American scarlet, as described by Mr. Thompson, in Loudon's Encyclopædia of Gardening, new edition.

Methven Scarlet, Methven castle, (and Methven scarlet, as often misspelt in some publications where it has been noticed.) This strawberry, though not highly prized in England, is in our climate a very valuable kind, and deserving of cultivation in every garden, where a good collection is wanted. It is also an abundant bearer. The fruit is very large, round, often coxcomb shaped, especially the first berries, and of a bright scarlet; flesh pale scarlet, not very firm; flavour good, but not so rich as the previous named ones; its size and productiveness is, perhaps, its greatest recommendation; yet it makes a fine appearance, is easily grown, and being much better than some kinds, we esteem it a desirable variety. We have grown it, measuring over six inches in circumference, and weighing upwards of half an ounce. The other fine scarlets are the Roseberry, black Roseberry, Garnetstone scarlet, and Coul late scarlet. We have not cultivated either of these.

Class 2.—Black Strawberries.

The flavour of all this class is very rich, and highly perfumed.

Downton, Knight's seedling of some catalogues. The fruit and largest berries often assuming a coxcomb shape; the flesh is firm, with a rich juicy, and high flavour; a good bearer, and ripens late. This is a much esteemed sort, and when grown to perfection, one of the largest and very best. The finest specimens, we have ever seen, were cultivated in the garden of the Hon. E. Vose, of Dorchester, who informed us that he had not failed of having a good crop every season.

Elton Seedling.—This variety was lately raised by Mr. Knight. The fruit is large, ovate, not filled out at the end of the berry, often coxcomb shaped, and of a shining dark red; flesh a fine red, firm, juicy, with a sharp, rich, agreeable flavour; it ripens the latest of all the strawberries we have ever cultivated; and the fruit must be allowed to remain on the vines, till it becomes very dark colored, or it is very inferior from its acidity.—The fruit grows on long foot stalks, which often appear above the foliage; it will be extensively cultivated when it becomes known.

Class 3.—Pine Strawberries.

Keen's Seedling, Keen's black pine, Keen's new pine, of English catalogues. Fruit very

large, round or ovate, sometimes of coxcomb shape in the largest berries, of a dark or shining red next the sun; seeds rather prominent on the surface; flesh scarlet, firm, with a rich and high flavoured juice; a most abundant bearer, ripening about the middle season of strawberries. It possesses all the good qualities of this fruit; but the vines are tender, and easily winter killed, and should always be protected during frost; although it is, or has been, extensively cultivated, yet we have never seen but a very few good specimens. It was first introduced to this country by Mr. Haggerston, about 7 years since, and has subsequently found its way into most all of our gardens. We have read in the English Magazine, accounts of exhibitions where this kind was presented, of such large size, that it took only 14 to weigh a pound. The largest we have ever seen here, it would have required at least 30 to the pound. It is a most excellent strawberry for forcing; it does not succeed well in rich light soil, but seems to prefer a stiff rich loam. We have never succeeded in growing it to our satisfaction.

Mulberry, Pine, Cherokee, King and Mahone, of some collections; fruit of medium size, ovate, conical, with a short neck, of a dark dull red; flesh red, juicy, and of an agreeable sub-acid flavour; a most abundant bearer. This is another strawberry of which we do not find any account in the English works; it is extensively cultivated around Boston for the market, for which purpose it is a fine kind. It is perfectly hardy, more so than perhaps any other; it ripens about the time, or just after the Royal scarlet. It is said to be a native of New York; and was first grown in this vicinity in the garden of the late Gov. Gore, who received it from Mr. King of New York.

Southborough Seedling: fruit large, ovate, conical, of a deep shining red colour: flesh firm, juicy, with an agreeable flavour; this is a fine strawberry, but not an abundant bearer. The foliage is strong and vigorous, and fruit on long footstalk. We would recommend it for its size, fine shape, and good flavour; indeed, we do not know a strawberry which has a richer appearance on the table.

Class 4.—Chile Strawberry.

Wilnot's Superb: fruit very large, round or rather ovate shaped, sometimes compressed, of a pale, shining scarlet colour; seeds prominent; flesh pale red, with a woody centre; flavour good but not rich; except in its size, we would recommend any of the others we have described.

Class 5.—Hautbois, (*Fragaria elatior*).

Prolific or conical Hautbois; double bearing, Hudson's Bay, and Musk, of some catalogues; fruit medium size, ovate, conical, of a very dark dull red, inclining to a purple on the sunny side; flesh greenish, firm, not very juicy, but of a highly perfumed flavour. This variety is an abundant bearer; we think the Hautbois strawberry the finest of the whole; they are not, it is true, so large as the pines or scarlet, but have a character peculiarly their own. In this class, there are what are called sterile and fertile plants, the former have long stamens, and should invariably be destroyed, as they produce no fruit. The variety is, however, much more free from making such runners than the others.

Class 5, includes the *Fragaria viridis* of botanists, the green strawberry as generally known. These varieties are but little known in our gardens.

Class 6.—Alpine and Wood Strawberries.

These are the red Alpine, white Alpine, red Wood, and white wood; the red or monthly, in some situations favourable, bears from June to October. The flavour is rich, berries large for this class, but small, compared with the other classes. The red and white Wood are too well known to need any description.

Strawberries are cultivated from seed, by runners, and by a division of the root; from the former to get new kinds, and the two latter to increase the stock; the bush Alpine can only be increased by division of the root. Strawberries should be grown in an open situation, exposed to the sun, and not shaded by trees; in the former site they grow strong and bear well; in the latter they run up weak, and produce but little fruit.

Strawberries are cultivated in beds, rows, or in hills; some adopt one, and some the other method, and each have their advocates; we prefer, however, their cultivation in beds. Some writers recommend planting in the fall, and others in the spring; and each have had such good success, as appears from their statements, that it seems immaterial which. We have tried both ways ourselves, but rather prefer fall planting to the spring, provided it is done previous to, or early in September; later than that, we would defer till April.

The soil we would recommend for strawberries is a rich, deep loam; this, particularly for pines and scarlets, we are confident will grow them better than any other; the woods and hautbois prefer a lighter one. The distance at which the former should be set, is recommended at 24 inches from row to row, and 18 inches apart in the rows; we have never adopted this plan, thinking it to be a waste of land; but from repeated trials, we are now convinced that like many other of the errors which have crept into our system of gardening, especially the prevalent notion of crowding plants together, it is a mistaken idea; planted so near together, they soon form one mass of foliage, and the runners rooting so close, the main roots have no chance of receiving any nourishment; the sun cannot penetrate into the soil through the leaves, nor the air have any effect upon the plants; the consequence is, that the vines are weak, the fruit late in ripening, of very small size, without colour, and almost tasteless. It may be said, that the runners can be cut off, and thus prevent such confusion; but we say that there is not then sufficient room to hoe and dig between the plants, to gather the fruit without injuring the vines, or to afford sufficient food for the roots. It is only from the established and invariably rule among the English gardeners, of setting their plants at greater distances than we do, that they are enabled to raise fruit that will weigh over an ounce each.

About the middle of August, let the piece of ground, where it is intended to set the strawberries, be prepared as follows: let every thing be cleared from the spot, and the whole raked even; if it is very rich it will not need much manure; but if ordinary garden soil, it should have about 3 inches of half decomposed cow or horse manure added; the soil should be 18 inches or 2 feet

deep, on a good subsoil. After the manure is spread, the piece should be trenched to the whole depth, beginning at one end and finishing at the other. If, however, the bottom soil is of a very inferior quality, it will be best to put the middle spit at the top, and the lower in the middle. The whole should be left to settle a few days, or until about the 1st September; it should then have added about 2 inches of well rotted manure, spread on the ground, and dug in lightly with the spade; it will then be ready for planting. The beds should be marked out, and the distances of the plants. We recommend the following dimensions, but they can be varied at the option of the cultivator. The beds should contain 3 rows, and should be 6 feet in width, and the alleys between 3 feet; the first row should be set 1 foot from the edge of the bed, the next 2 feet from that, and the other corresponding with the first; the plants to be 18 inches apart in the rows. Select good strong plants from the nursery beds, with bold buds; choosing the first runners, nearest the old plant, rather than those at a distance; if they are well transplanted, they will need no farther care except watering, hoeing, and weeding, until cold weather.

Upon the approach of frost, if the Keen's, they should have a little straw, leaves, or old haulm, strewed over them, if this is done to any of the kinds the first season, they will be benefitted by it. It is not, as every reader is probably aware, the extreme cold that does the damage, but the freezing and thawing, which is continually going on in the months of February and March; the great heat of our scorching sun, causing the surface of the ground to thaw, and at night freezing up again, often times throwing the roots completely out of the ground.

The first warm day in April, the beds should be uncovered, as the plants are liable to damp if it remains on; the weeds should be kept clear from the plants, and as soon as the fruit is set, a little loose straw should be placed between the rows for the trusses of fruit to lie upon, and protect them from the dirt. The runners should be cut off two or three times during the season. When the crop is gathered, the same care should be taken, and all the weeds hoed up, and the runners cut; strawberry beds are often ruined by ten or twelve days' neglect. The produce is very good the first season; the second it is the greatest, and the third moderate; the fall of the third they should be destroyed, and new ones made.—During spring, before the bloom, and also after the fruit is set, the vines should have frequent and copious waterings. In England, where the soil is almost moist, and where there is not as Cobbett says, sun enough to kill a weed when hoed up, they give their strawberry beds large quantities of water. What should we do in our climate, where with the exception of one or two showers, although they fall with force enough to dash the fruit completely into the ground, leave the soil as dry in a day or two as ever? It should not escape the mind of the strawberry grower, to give plenty of water.

This is the method we have practised, with the exception of the distances we have recommended, and one or two other particulars; if it is followed, a good crop may be relied upon. The Hautbois and the Wood varieties, need not be set

at so great distances, but judgment must guide in this, as well as other things.—*Conds.*

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,.....	bushel.	2 50	—
CATTLE, on the hoof,.....	100lbs.	6 00	7 00
CORN, yellow,.....	bushel.	new 76a78	—
White,.....	do	76a78	—
COTTON, Virginia,.....	pound.	15½	—
North Carolina,.....	"	—	—
Upland,.....	"	15½	17½
FEATHERS,.....	pound.	—	45
FLAXSEED,.....	bushel.	—	1 37
FLOUR&MEAL—Best wh. wh't fam.	barrel.	7 75	8 25
Do. do. baker's,.....	"	7 25	7 75
Do. do. Superfine,.....	"	7 00	—
SuperHow. st. in good de'd	"	6 94	—
" " wagon price,.....	"	6 75	6 87
City Mills, extra,.....	"	—	7 00
Do.	"	6 87	—
Susquehanna, firm&scarce	"	6 75	—
Rye,.....	"	5 00	5 25
Kiln-dried Meal, in hhds.	hhd.	19 50	20 00
do. in bbls.	bbl.	4 37	4 50
GRASS SEEDS, red Clover,.....	bushel.	5 25	5 37
Timothy (herds of the north)	"	2 75	3 25
Orchard,.....	"	2 25	3 00
Tall meadow Oat,.....	"	2 00	2 50
Herds, or red top,.....	"	1 00	1 25
HAY, in bulk,.....	ton.	—	15 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	8
HOGS, on the hoof,.....	100lb.	8 37	—
Slaughtered,.....	"	8 37	—
HOPS—first sort,.....	pound.	18	—
second,.....	"	16	—
refuse,.....	"	14	—
LIME,.....	bushel.	33	35
MUSTARD SEED, Domestic,.....	"	5 00	6 00
OATS,.....	"	42	45
PEAS, red eye,.....	bushel.	—	—
Black eye,.....	"	—	1 25
Lady,.....	"	—	—
PLASTER PARIS, in the stone,.....	ton.	—	6 00
Ground,.....	barrel.	1 50	—
PALMA CHRISTA BEAN,.....	bushel.	2 00	—
RAGS,.....	pound.	3	4
RYE,.....	bushel.	90	92
Susquehanna,.....	"	none	—
TOBACCO, crop, common,.....	100 lbs	5 00	5 50
" brown and red,....	"	5 00	7 00
" fine red,.....	"	7 00	9 00
" wrappry, suitable	"	—	—
" for segars,.....	"	5 00	10 00
" yellow and red,....	"	6 00	8 00
" good yellow,....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"	4 75	5 00
" ground leaf,....	"	5 00	8 00
Virginia,.....	"	6 00	—
Rappahannock,.....	"	—	—
Kentucky,.....	"	8 00	14 00
WHEAT, white,.....	bushel.	1 50	—
Red,.....	"	1 45	1 48
WHISKEY, 1st pf. in bbls.	gallon.	37	—
" in hhds.	"	35½	—
" wagon price,.....	"	33	33½
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	2 25	—
To Wheeling, ..	"	2 00	—
WOOL, Prime & Saxon Fleeces, ..	pound.	55 to 68	30 32
Full Merino,.....	"	48 55	28 30
Three fourths Merino,.....	"	45 48	26 28
One half do.....	"	40 45	24 26
Common & one fourth Meri.	"	36 40	22 24
Pulled,.....	"	38 40	23 24

BARNITZ'S BREED OF HOGS.

WITHIN a few days, four of my sows of the above breed have got fine healthy litters of pigs, and appear as if they would do credit to that celebrated breed, and will be ready to deliver to order the latter part of April. Price \$10 a pair. ROBT. SINCLAIR, march 1 Clairmont Nursery, near Baltimore.

A DURHAM BULL FOR SALE.

THE editor of the Farmer & Gardener has for sale the beautiful Improved Durham short-horn bull BOS, deliverable in Baltimore, as soon as the navigation between this and the Hudson river is free of ice. He is of good size, was 4 years old last August; his pedigree which will be well authenticated, is as follows:

"His sire *Wye Champion*; his dam *Brinda*. *Wye Champion* was bred by Governor Lloyd, at his Wye-house farm, Md. His sire *Champion*, his dam *Shepherdess*. *Champion* and *Shepherdess* were imported from England, by Mr. Skinner, former editor of the American Farmer, and by him sold to Gov. Lloyd. They were considered so great an acquisition to the country, that Congress remitted the duties on them; and their pedigree are recorded on the last page of the Memoirs of the Pennsylvania Agricultural Society. Gov. Lloyd after keeping them several years sold them to J. H. Powell, Esq. They were bred by Mr. *Champion*, a celebrated breeder in England. *Champion* was by *Warrior*, dam by Mr. Coate's *Palm Flower*, g. d. by *Driffeld*—g. g. d. by *Charge's* bull of *Newton*: *Shepherdess* was got by *Magnet*, dam by *Prince*; g. d. by the Duke of *Leeds'* bull *Magnet*, who was got by *Warrior*, dam *Magdeline*. *Warrior* was got by R. Colling's *Wellington*. *Wellington* by *Comet*, dam, *Wildair*. See proceedings of Agricultural Society of Maryland, respecting them in 4th volume American Farmer p. 114.

Brinda was bred by Mr. James Cox, of Pennsylvania. Her sire was *Chester*, dam, *Corinna*. *Corinna* was got by *Bishop*, dam, *Cora*. *Chester* got by *Blythe*. *Blythe* out of *Champion* and *Shepherdess*. *Flora* was imported at the same time with *Champion* and *Shepherdess*—*Blythe* the last season Mr. Cox had him, went to 95 cows at \$5 each, and sold at the end of the season for \$500.

His price is \$225.

All letters upon the subject must be post paid. march 1

IMPROVED DURHAM STOCK.

THE editor of the Farmer and Gardener has for sale the following valuable stock:

The bull *Brilliant*, a large sized animal of the Improved Durham Short-horn breed. He is red and white; was got in England, and calved in Frederick county, Md., on the 12th May, 1829, and now rising 6 years old. His dam was *Matchless*, got by *Favorite*, (purchased at the sale of the late R. Colling, a celebrated breeder) son of *Favorite*, dam by H. Allison's *Gray* bull, sire *Orlando*, that died on the passage from Liverpool, out of *Rosina*, from Yorkshire, that gained the highest prize premium of ten sovereigns at a Cattle show in Manchester, England.

His price is \$200.

The bull *President*, son of *Brilliant*, out of an imported full blood Durham short-horn cow: he is rising 3 years.

His price is \$250.

A beautiful milk white heifer, out of the dam of *President*, got by a full blooded bull of the Hon. Charles A. Barnitz, of York, Pa. She is a remarkably large animal, of fine form for milking, and is now in calf by *Brilliant*.

Her price is \$300.

A two year old heifer, out of the imported cow, the sire of *Brilliant*, and got by the latter. Her price is \$150. 2 3-4 blooded bull calves of the same family, 2 months old. Prices \$30 and \$25.

He has also for sale, 2 full blooded *Saxony* RAMS, and 2 3-4 blooded do. These sheep are of a family, remarkable for their fine fleece, their wool always commanding the best prices in the market. march 1

GAMA GRASS ROOTS.

3000 Gama Grass roots will be received, and for sale about the 20th of March. By obtaining roots of this valuable grass, farmers will gain the advantage of two years over seed plantation.

March 1

ROBT. SINCLAIR.

NEW CHINESE MULBERRY, OR MORUS MULTICAULIS.

I have for sale a few thousand trees and cuttings of the above. The former are good strong plants, 3 to 4 feet, two years old. Price \$40 per 100, or \$6 per doz.

One year old plants could be sold much lower but the trees would be small and badly rooted—Cuttings \$60 per 1000, \$8 per 100—2 buds on each.

ROBERT SINCLAIR,

Clairmont Nursery, near Baltimore.

march 1

FIELD SEEDS.

NEW AND RARE SORTS.

THE Subscriber is just receiving ADDITIONAL SUPPLIES of European and other FIELD SEEDS, among which are many new and RARE KINDS, and well adapted to suit the MIDDLE and SOUTHERN STATES, viz:

PERENNIAL and ITALIAN RYE GRASS, these grasses, particularly the former, are extensively cultivated in Europe, are generally mixed with clover; fine pasture, rich moist meadow land suits them best. Sow 1 bushel to an acre.

SAINFOIN or ESPERSETT, particularly adapted to a calcareous or chalky soil, considered in England, one of the most valuable plants: farmers not possessing calcareous soils, may succeed with this grass by dressing their lands with clay marl. This grass would no doubt flourish well in our most southern states.—3 to 4 bushels of seed should be sown per acre.

FIELD BURNETT, this grass is well suited for sowing on high, gravelly soils; fine sheep pasture—sow 2 bushels per acre.

SCARLET CLOVER, or TREFOIL—*Trifolium incarnatum*. A valuable early grass, and fine for soiling in summer, or supplying food when other grasses are winter killed. If sown in the fall it can be cut three weeks earlier than common clover, or if sown in the months of April, 50 days after sowing. From its rapid growth it is likely to become a valuable acquisition to the farmer—20 lbs. is required to seed one acre. Also for sale a few pounds **YELLOW TREFOIL**.

WHITE DUTCH CLOVER.—Fine pasture, and for lawns. Its increase is very much facilitated by a top dressing of ashes—sow half peck per acre.

BLUE GRASS, GREEN GRASS, &c.—Suitable for forming fine green swards, and sometimes sown for pasture, and on meadow land—sow 1 to 2 bushels per acre.

SWEET SCENTED VERNAL GRASS.—Particularly valuable for pasture, very early; proper situation well drained meadow land.

MILLET.—The stalk of this plant resembles those of Indian corn, though much smaller, principally valuable for green fodder, 2 good crops can be raised during the season, the first to be sown about the 20th May, on a rich light soil—half a bushel of seed should be sown per acre, if fodder is the object, and less if for seed.

ENGLISH & POLAND OATS—several sorts weighing 44 lbs. per bushel, cultivated as the common kinds.

SKINLESS OATS.—The grain naked like wheat, should be sown about 15th April. A product of 80 bushels, is said can be produced from one acre, and each bushel is worth three times more than the common oats—price 50 cts. per lb.

SPRING & WINTER VETCHES or TARES.

LUCERNE or FRENCH CLOVER.—Very valuable, especially for soiling, bears cutting several times during summer, requires a deep rich loam, not wet. Stands the severest winters, and drought does not effect it—20 lbs. is sufficient to seed one acre, if sown broad cast—half a bushel of rye or oats if sown with 20 lbs. of seed will effectually protect the tender plants from weeds.—See Am. Farmer.

GAMA GRASS.—This last but not least in value, is a strong coarse grass, indigenous to all the Southern States, but has been but partially cultivated, its product is immense. Animals eat it with avidity. An ounce of seed which contains 260 kernels, will by being planted and subdivided three seasons in succession, enable the culturist to set out a meadow of 53 1-2 acres, which will last him an age—price 50 cts. per ounce.

ALSO

MANGOLD WURZEL, or large pale red Beet; **RUTA BAGA**; **LARGE YELLOW TURNIP**; **ROUND & LONG CROOKED PUMPKIN**; **FIELD PEAS and BEANS**; **COW CABBAGE**, or **Cacaesanam Kale**, a fine green fodder for cattle; **Altringham Carrot**; **MERCER, EARLY KIDNEY & EARLY ROUND POTATOES**.

For sale by **R. SINCLAIR, Jr.**
fe 23 Light, near Pratt st.

CONTENTS OF THIS NUMBER.

Notices—of a cut of a farm house of a farmer in moderate circumstances—of the "*Virginia corn and cob crusher and grinder*," with remarks on the great utility of ground and boiled or steamed food for stock—work for March—account of a large hog—drawing and description of a farm house by Robert Sinclair—Moseley on the cultivation of fruit—Weeds recommended to be destroyed—New mode of cultivating hops—Independence of the farmer—agricultural scraps—account of various varieties of the strawberry and the mode of cultivation—prices current—Advertisements.



TREES—SEEDS, &c.

100 LBS. White Italian Mulberry Seed, direct from the most celebrated Silk Districts in Italy. 75 lbs. White Mulberry Seed of American growth. 60,000 Chinese Mulberry cuttings perfectly prepared for planting.

2,500 Chinese Mulberries, of large size, 900 of which are inoculated on the white mulberry, which gives them additional hardihood—price \$50 per 100.

These trees were planted in an orchard which it is necessary now to remove.

35,000 Chinese Mulberries of the usual sizes at \$25 to \$30 per 100, and some of larger sizes, at \$37 per 100.

Fruit and Ornamental trees, Green-house Plants, Roses, Bulbous roots, &c. The collection of which is unrivalled, and priced Catalogues of which will be sent to every applicant. Double Dahlias above 500 most splendid varieties, and comprising 200 very rare and superb kinds not to be found elsewhere in the Union.

Garden, agricultural, and flower seeds—an immense collection comprising all the new and rare varieties of vegetables, &c., as will be seen by the catalogue.

20 bushels of the celebrated chevalier Barley.

1,000 lbs. Early Crimson Clover, or *Trifolium incarnatum*.

2,000 lbs. White Dutch Clover,

20 bushels Talavera wheat.

10 do Venetian do

100 do Early August and Hopetown oats, the latter weighing 44 lbs. per bushel.

160 do Orchard Grass seed.

75 do Tall meadow oats grass.

30 do Italian Rye grass (very valuable).

100 do Pacey's perennial rye grass.

2,000 lbs. Finest Provence Lucerne.

20 bushels new white Field Beans. (very productive).

300 bushels early Nonpareil, Saccharine Pink Eye.

Taylor's Forty-fold and other celebrated Potatoes.

25 bushels Potato Onions.

Also, Field Burnett, St. Foin or Espargette, Large Riga Flax, Lentils, Vetches, Millet, Yellow Clover—a superior large variety of Teazel—2 varieties of Castor Oil—Bean, Weld, Woad, Madder, &c.

Orders sent direct per mail will receive immediate attention, and seeds in quantity will be supplied at very moderate rates.

WM. PRINCE & SONS,

Linnæan Botanic Garden & Nurseries, Flushing near N. Y.
Feb. 23 2t

GAMA GRASS SEED.

JUST received, a fresh supply of Gama Grass Seed. This is the grass that bears cutting every 15 days for soiling, and every thirty days for hay, from the middle of May till frost, say till the middle of November, and has yielded at the rate of 64 tons to the acre under peculiarly favorable circumstances, and from an acre of which 30 tons may be calculated upon. The earlier it is sown in the spring the better. **ROBERT SINCLAIR, Jr.**

Maryland Agricultural Repository, Light near Pratt street.
feb 9

DEVON STOCK.

THE editor of the *Farmer and Gardener* can at all times supply orders for *Devon Cattle*. This breed is so distinguished for their easy keep and docility; the richness of the milk of the cows, and for the activity and sprightliness of the oxen, that they would be admirably suited to the purposes of southern agriculturists.

The happy adaptation of the *Devonshire Oxen*, for the purposes of the farm, will be understood, when it is stated that 4 oxen have been known to plough 2 acres of ground in a day, and a team of them to trot at the rate of six miles an hour with an empty wagon.

Any person wishing to procure them can be supplied by addressing a letter *post paid* to the editor of the *Farmer and Gardener*.
nov 10 4t

SHEEP AND CATTLE.

THE Editor of the *Farmer and Gardener*, Baltimore, is authorised to sell a part of the stock of **SHEEP & COWS** of John Barney, Esq. so well known as a successful breeder, while he resided at *Fort Penn, Del.* The *Sheep* are of the Bakewell breed, and he has been particular to keep up their purity and integrity of constitution, by periodical importations of rams to prevent the evil consequences of breeding in and in. The price is \$50 for rams and \$25 for ewes. Ewes with lambs by their side, deliverable first of April, \$35.

Among the rams there is a most splendid animal, imported by Mr. Barney from England, the sire of many of his yearlings—his price is \$100.

His Cows consist of about 20 in number, and have been bred for their fine dairy qualities. They are large sized and all deep milkers. There are among them 7-8 and 3-4 Durhams, Durhams and Devons, Durhams & Simmes' imported breed, and crosses with a favorite French bull imported some years since by the late *Stephen Girard*, esq. The price of these cows are \$100 each.

To those who are acquainted with the reputation of Mr. Barney as a breeder and grazier, it is unnecessary to add any thing in favor of his stock; but to those who may be unacquainted with him, it may be proper to observe that his great pride with respect to his sheep, has been to combine weight of carcass with yield of fleece, and that his object with his cows has always been, to breed for size and deep milking, and that thirty years' experience has not been lost upon a gentleman of his class and acute observation.

All letters upon the subject must be *post paid*. feb 9

FOR SALE ON MODERATE TERMS.

THE editor of the *Farmer and Gardener* has for sale two most beautiful *Devonshire Bulls*, rising three years of age each, of pure and celebrated blood. Also, one Bull 4 years old, a cross between a full bred Durham bull and a pure Devon cow. This noble animal combines in a remarkable degree the good points of both breeds. To gentlemen of the south who may desire to improve their stocks of cattle, the present is an opportunity rarely to be met with. All letters to the editor upon the subject must be *post paid*. de 29

A BROOD MARE FOR SALE.

A SUBSCRIBER in Virginia writes to us as follows:

"I have a considerable stock of Blood Horses on hand, which would allow me to spare a Brood Mare, by the celebrated *Contention*. Should any gentleman wish to breed from any of the imported or other horses in the south, it would afford a fine opportunity to purchase her and have her served before taking her to the north. She is young, has brought two colts, and can be accompanied by well authenticated testimonials of pedigree, as her sire is well known, and her dam was once owned by Col. Wm. R. Johnson."

Any person desirous of purchasing a Brood Mare of the above description, can be supplied by addressing a letter to the Editor of the *Farmer and Gardener*—*post paid*.
Feb. 16. 4t.

TO AGRICULTURISTS—The analysis of Soils, marls, mineral waters, and other productions, interesting those engaged in Agricultural pursuits, is performed with promptness and accuracy, by

TYSON & FISHER, Chemists,
3t Druggists, No. 192 Market street, Baltimore.

STOCK OF IMPROVED SHORT HORN DURHAM.

THE editor of the *Farmer and Gardener*, Baltimore, has for sale two 7-8 and four 3-4 bred cows, 2 full bred and seven 7-8 bred bulls of the improved short-horn breed. They are all fine animals whether regard be had to their milking or fattening propensities. Their pedigrees are indisputable, all tracing to the *British Herd book*. They will be sold low for cash, their excellence being considered.—To any person, company, or society, who may want several, a great bargain would be given.

Letters addressed to the editor upon this subject, must be *post paid*. nov 10 4t

WHITE TURKEYS.

A few pair of White Turkeys would be purchased at the Agricultural Repository in Light near Pratt street, by **ROBERT SINCLAIR, Jr.**
de 29 3t.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 45.

BALTIMORE, MD. MARCH 8, 1836.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, MARCH 8, 1836.

We insert in another part of this day's paper, a very interesting communication from the Messrs. *Prince & Sons*, upon the mooted question—whether the *Morus Multicaulis* tree will transmit its kind by seed? and we are happy to perceive that their views accord with our own, and the experience of a friend of our's in Baltimore. The deserved high standing of these gentlemen will add much weight to their opinion, and go far to put down the fears that have been unnecessarily excited on this head.

ANOTHER SILK COMPANY.—A meeting was held by the citizens of *West Chester*, Penn., on the 10th ult., at which articles of association were entered into to encourage the production and manufacture of Silk, and the better to enable the meeting to carry the object of the association into effect, and to avail themselves of the provisions of an act passed by the legislature in 1832, to "promote the culture of silk," they agreed to form themselves into a company, to be styled "*the Chester county Silk company*," and bound themselves to conform to the provisions of the said act. The capital stock of the company, is to be \$50,000, and to be divided into 2,000 shares, of \$25 each.

NEW YORK AGRICULTURAL CONVENTION.

A numerous attended agricultural convention met at Albany, New York, on the 8th ult., and appointed the following gentlemen officers, viz:

J. BUEL, of Albany, President.
C. WENDELL, of Washington, 1st V. Pres't.
J. McCALL, of Alleghany, 2d do
L. BRADISH, of Franklin, 3d do
P. PATTERSON, of Genesee, 4th do
D. S. DICKINSON of Broome, and
J. J. VIBLE of Rensselaer, Secretaries.

The convention adopted a report, and memorial to the legislature. The resolutions accompanying and forming a component part of the re-

port specify the objects which the convention desire to advance. They recommend:

1st. That the legislature should make an appropriation of public money, to excite industry and emulation in agriculture, to reward those who make important discoveries in labor saving machines, or in other departments of husbandry, or who improve or extend useful methods of cultivation.

2d. That the legislature should offer a premium for the discovery of a perfect preventive or remedy for the ravages of the wheat worm.

3d. That the friends of agricultural improvement throughout the state co-operate with the convention in endeavours to obtain the legislative aid asked, and that they form an agricultural society in each county.

4th. That the existing laws relative to roads and bridges, should be altered and amended.

5th. That the state agricultural papers should be encouraged.

6th. That a geological survey of the state should be made.

7th. That provision be made by the legislature, to encourage the growth and manufacture of silk.

8th. That the elementary books on agriculture and Horticulture, should be introduced into the common schools as reading books.

9th. That another agricultural convention be held in Albany, on the first Thursday of February next.

Before the convention adjourned, they organized a central committee of correspondence, and recommended the formation of auxiliary committees in each of the counties.

ROSA GREVILLII.

An esteemed correspondent from Zanesville, Ohio, having inquired of us whether the *Greville Rose* is double, we take this occasion to say, that it is a non-descript in all its qualities and characteristics. We have seen upon the same bush, double, semi-double, and single, nay in the same cluster we have counted them of almost every hue, tint and shade, and form. It is of the multiflora variety, and it does no discredit to the peculiar designation to which it has been allotted—it may with propriety be called a many flowered rose; for almost every eye of the wood of the preceding year sends forth a bunch of many colored

flowers. It is not unfrequent that you may see from twelve to twenty roses on the wood of the same eye, each differing in color and every other trait of character by which this beautiful favorite of the Floral family is marked, not two, perhaps in the whole number alike, and varying from pure white through every grade to purple. Upon one occasion we recollect to have counted twenty-two of this description in the same cluster.

It may in truth be called a wonderful flower, whether its singular beauty or rapid growth be considered, and we know nothing of its family more entitled to claim precedence in the garden or on the court.

DRAINING—TO UNDERDRAIN CLAY LANDS.

This operation is always best performed in spring or summer, when the ground is dry. Main drains ought to be made in every part of the field where a cross-cut, or open drain was formerly wanted; they ought to be cut four feet deep, upon an average. This completely secures them from the possibility of being damaged by the treading of horses or cattle, and being so far below the small drains, clear the water finely out of them.—In every situation, pipe-turfs for the main drains, if they can be had, are preferable. If good stiff clay, a single row of pipe-turf; if sandy, a double row. When pipe-turf cannot be got conveniently, a good wedge-drain may answer well; when the sub-soil be only moderately so, a thorn-drain, with cuples below, will do still better; and if the sub-soil is very sandy, except pipes can be had, it is in vain to attempt under-draining the field by any other method. It may be necessary to mention here, that the size of the length and declivity of the run, and the quantity of water to be carried off by them. It is always safe, however, to have the main drains larger and plenty of them; for economy here seldom turns out well.

Having furnished the main drains, proceed next to make a small drain in every furrow of the field, if the ridges formerly have not been less than 15 feet wide. But if that should be the case, first level the ridges, and make the drains in the best direction, and at such a distance from each other as may be thought necessary. If the water rises well in the bottom of the drains, they ought to be cut three feet deep; and in this case would dry

the field sufficiently well, although they were from 25 to 30 feet asunder; but if the water does not draw well to the bottom of the drains, two feet will be a sufficient deepness for the pipe drain, and $2\frac{1}{2}$ feet for the wedge drain. In no case ought they to be shallower where the field has been previously levelled. In this instance, however, as the surface is carried off chiefly by the water sinking immediately into the top of the drains, it will be necessary to have the drains much nearer each other, say from 15 to 20 feet. If the ridges are more than 15 feet wide, however broad and irregular they may have been, follow invariably the line of the old furrows, as the best direction for the drains; and, where they are high-gathered ridges, from 20 to 24 inches will be a sufficient depth for the pipe-drain, and from 24 to 30 inches for the wedge-drain. Particular care should be taken in connecting the small and main drains together, so as the water may have a gentle declivity, with free access into the main drains.

When the drains are finished, the ridges are cleared down upon drains by the plough; and where they had been very high formerly, a second clearing may be given; but it is better not to level the ridges too much, for by allowing them to retain a little of their former shape, the ground being lowest immediately where the drains are, the surface water collects upon the top of the drains; and, by shrinking into them, gets freely away.—After the field is thus finished, run the new ridges across the small drains, making them about nine or ten feet broad, and continue afterwards to plough the field in the same manner as dry land.

It is evident from the above method of draining, that the expense will vary very much, according to the quantity of main drains necessary for the field, the distance of the small drains from each other, and the distance the turf is to be carried. In general, when the drains are about 20 feet asunder, the cost will be about 2*l* 2*s* per acre, for cutting, &c., and 1*l* 2*s* per acre for cartage of turf.

The advantage resulting from under-draining is very great; for besides a considerable saving annually of water furrowing, cross cutting, and the land can often be ploughed and sown to advantage, both in the spring and in the fall of the year, when otherwise it would be found quite impracticable; every species of drilled crops, such as beans, potatoes, turnips, &c. can be cultivated successfully, and every species, both of green and white crops, is less apt to fail in wet and untoward seasons.—*Mackenzie.*

We published some months since, a description of the apparatus used by the Hon. *Charles A. Barnitz*, of York, Pennsylvania, for boiling food for his stock, and from the deservedly high reputation of that gentleman as a scientific and practical farmer, combined with its very moderate cost, it created no little attention, and we have had several inquiries made of us to know, whether it were possible that efficient fixtures could be put up for so trifling an amount; but the most amusing of all the inquiries was one built upon a mistaken construction of that gentleman's description, which by the bye, was so plain and easily understood that he that run might read. But to dissolve the doubts built up in the imagination of our correspondent, we addressed a letter to Mr. Barnitz, asking an explanation, which will be found below in the form of a description, and which he gave us with that promptness and cordiality of feeling which is at once so honorable to the donor and so grateful to the recipient of favors. For ourself, and in the name of the agricultural community, whom upon this as upon numerous other occasions he has benefitted so much, we tender him our sincere thanks.

CHEAP BOILING APPARATUS.

"Take a kettle or vessel of the capacity of forty gallons; (the cast iron kettles are to be had at every hardware store, or foundry) place one of them over a small draft or flue about a foot square, and carry the flue up behind the vessel in the shape of a chimney—made so that the greatest possible heat may be in contact at the bottom, and back part of the kettle. A rough board shed is put round the whole to shelter it, say about eight feet square, and the chimney is topped out above the roof of this shed.

In about two hours a hogshead of slop may be had from boiled potatoes, or refuse vegetables, which with a little mixture of corn meal and salt, will furnish a day's keep for 40 or 50 pigs, of the most nourishing, healthy and economical kind."

The expense of this fixture is stated in the former account at \$8, and we would ask will any farmer or planter who has any stock worth speaking of to feed, be longer without such a convenience? If he consults his interest, he certainly will not. There is hardly a farmer in the country that could not set up one himself, and save at least one-third of its expense, so that the cost of it is hardly worthy of being entertained at all.

AGRICULTURAL SOCIETY MEETING.

We copy the subjoined paragraph from the *Norfolk Beacon* of the 29th ultimo, with the more pleasure, as we agree with the intelligent and patriotic editors of that print, in the great benefits to result from institutions of the kind.

We have long desired to see similar associations organized in every county in the several States, where they do not already exist, and a general State Society in each of the States, to be composed of deputies from the county societies, whose duty it should be to hold annual meetings at which the Agricultural interests should be freely and fully discussed; and whatever measures which might appear needful, after mature consideration, be respectfully embodied in a report to be laid before the legislatures of the States respectively.

THE NORFOLK AGRICULTURAL SOCIETY—
Meeting on Thursday next at the Great Bridge.—This society has been founded under the most promising auspices. The neighboring counties are determined to support it. At the meeting of organization, there were not only deputies from the counties of this district, but from the state of North Carolina, at points at least fifty miles distant from the place of meeting. We learn that the place for holding its sessions will be varied according to circumstances. Thus, the Great Bridge, Portsmouth, Suffolk, Smithfield, Kempsville, Norfolk, &c., will be selected at convenient periods, and in this way the comfort and convenience of the members will be consulted, while the operations of the society will pass under the eyes of a greater number of people.

Now is the time for our farmers to make a strong, determined and united movement. There is something in the present era which impels to action. We must move onward with the onward spirit of the age, or sink deeper and deeper every hour. We must stir ourselves; we must improve the face of the country; we must enrich our lands and cultivate them according to system; we must adopt means whereby the experience of all shall become the property of each. And herein consists one of the great secrets of agricultural success,—the blending the experience of others with our own. And what method can be adopted with a view of attaining this important purpose more effectual than the scheme of the Norfolk Agricultural Society? an institution whose organization has been devised from a strict survey of the causes that led to the decline of the late society, as well as from a philosophical estimate of the peculiar circumstances of this section of country? We trust that no industrious farmer will fail to attend on Thursday next.

We look forward with much pleasure to the exhibitions of the society. What a pretty sight to see a number of fine horses 'appearing before a committee' to have their merits adjudged, and the prize decreed to the worthiest? How pleasant to see a hundred or two milch cows from every section of the district, toddling into town, fairly trembling under their milky burden? We say nothing of other animals—in fine every subject of household use, animate or inanimate, will come in for a premium. From such rivalry we may anticipate the most favorable results. In a short time the eye of the passing traveller will detect the change, as he hastes along. We will perceive it in the improved variety of our market products, as well as in the general aspect of the district.

We long to see these things, and we believe that a well regulated Agricultural Society is the best means of bringing them forth. We trust therefore that our farmers, if they have any regard for their own interests, will visit the Great Bridge on *Thursday next*.

PROFESSOR DUCATEL'S REPORT.

We have commenced in our present number the *geological report* made by this gentleman to the Executive of this state. It is a paper written with great ability, and with a profound knowledge of the subjects of which it treats, and is marked throughout with that manliness of thought and directness of purpose for which he is distinguished. It contains a vast fund of the most interesting information, and is replete with facts of profound import, as connected with the physical aspect and agricultural resources of Maryland. The views which the professor takes of the contemplated improvements on the eastern shore, are just and appropriate. We think with him, that they are called for by the interests and necessities of the patriotic people who reside thereon, and sincerely hope that the government of the state will not only act upon his suggestions, but act with determination and vigor.

In reading the report we were delighted to find that the counties named by him were so rich in the *matériel* of resuscitation for their naturally generous though ill-treated soils. If Professor Ducatel had done nothing else than point out those inexhaustible mines of wealth to the farmer, he would indeed have achieved a work of incalculable benefit to the state—a benefit, whose blessings will be felt for centuries.

We were especially gratified at the recital which he makes of the agricultural advantages possessed by the residents of the eastern peninsula, and the facility with which their soil may be brought up to a state of fertility; nor were we less pleased to trace through the whole work a desire to do justice to both. Indeed, to bring our notice to a close, we would say that we have not for many years risen from the perusal of any paper that has afforded us more edification or pleasure. His agricultural recommendations and criticisms are generally conceived in a spirit of enlightened patriotism and just discrimination, and reflect no less credit upon his head than upon his heart.

[For the Farmer & Gardener.]

Linnæan Botanic Garden, Feb. 29, 1836.

Mr. E. P. ROBERTS,—Noticing an article in your paper of the 23d instant, on the *Morus Multicaulis*, we will hastily pen a few lines, stating our views in a summary manner. First—we

consider the *Morus Multicaulis* as an entirely distinct species from *Morus Alba*, and consequently we feel well assured that it will produce *precisely its like* from the seed—this being the character of a species, and even being the case in many instances with strongly marked varieties.

The Chinese seed sown last season did not produce plants of the *Morus Multicaulis*, and therefore it has been asserted that *its seed* would not produce the identical tree. We should suppose the first point to be decided would be—was the Chinese seed the *genuine Morus Multicaulis*? It is of course well known that *Morus Alba* is a native of China, and far more common there than any other species, and is it not therefore most probable that they sent that which was most readily procurable? The error appears to have arisen from a supposition that because the seed came from China, it must of course produce that variety which we designate as Chinese, whereas there are several species and innumerable varieties in China. For our part what surprises us most is that the seed produced Mulberry trees of *any variety*, for had it produced some noxious weed, like the Tea seed announced some time ago as so flourishing in North Carolina, it would have been more in character with the vile trash which they have hitherto sent as valuable seeds. We will mention an instance that occurred with ourselves. After making trial of numerous importations of Chinese seeds and finding them worthless, a friend presented us with sixty gilt China jars, each containing a different species of seed, which had been obtained expressly for him by his agent at Canton. We expressed doubts, but these were silenced, and the beautiful gilded jars aided to put them to rest, as we conceived none but the most valuable seeds would be put up in so careful and expensive a manner. We planted them with great care, but lo! only three or four kinds ever vegetated, and these were the common red Cockscomb, an *Acacia*, and some noxious weeds. Please excuse this digression—The original *Morus Multicaulis* tree introduced to America, is still growing in our Nursery, and it and others have produced fruit, which was dark red, or black, and if we recollect right, the flavor was not unpleasant. We have now in our possession seeds of the *Morus Multicaulis*, and also seeds hybridized between it and another very superior large leaved variety, of much hardier character. The quantity of each is so small that we shall retain it for our own sowing—Applicants for seed will not, however, have to wait many years before the supply will be abundant. We have heard it even intimated that the tree did not produce seed, whereas the reason why seed is not already plentiful is sufficiently obvious. So great has been the demand for the trees, and such is the ease of propagation from cuttings, that scarcely any trees have been allowed to retain branches for fruit bearing, the new wood which should produce fruit having been converted into scions. This explanation alone will account for the present deficiency of seed, which will become plentiful enough as soon as a portion of the trees are allowed to attain ample dimensions.

Yours, most respectfully,

WM. PRINCE & SONS.

THE GAMA GRASS AGAIN.

To the Editor of the Farmer and Gardener—

DEAR SIR—Much has been said and many have written on the subject of this *newly noted* grass in your paper, and other esteemed agricultural periodicals of the day.

But, I conceive this subject is yet far from being exhausted—that the cultivation of this valuable vegetable, as it regards the purposes of both soiling and winter provender for cattle, is richly worthy of eliciting new experimental light. With this view I pen the present article, and offer it for your better judgment to determine whether it be worthy of a place in your columns.

My experiment with this grass has been on a very small scale it is true, but that matters not as to the limits it may afford.

Two years ago last month, I received of a friend, sixteen Gama Grass seeds, and planted them immediately about ten inches apart in the drill, and two inches under the soil. Having understood that these seed were tardy coming up, I set a small stick by each one, and kept the ground clear of weeds in the spring. Six at length vegetated about the middle of May. The rest appeared not to vegetate the season. Yet, as I since learned, they too would probably have put forth the following spring, if the ground had been kept prepared. The growth of these apparently young oats or wheat blades, through the summer, fully answered my expectation, though raised pretty high by the accounts thereof, which I read and heard. Last spring I grubbed up three branches of the six, and with the help of a chisel and a knife, divided them into sets; each with one root at least attached. I transplanted these two feet distant each way, in an oblong piece of ground, eleven yards long and two feet wide. The soil, a very ordinary loamy one, was helped by ploughing in a dressing of stable manure early in the spring, and putting some well rotted compost in the drill, before setting the plants. Their growth fully realized my hopes, and they now lack but little more than half of taking complete possession of the ground. I cultivated or harrowed them, and displaced the weeds once or twice in the early part of the season. My immediate object being to obtain all the seed I could. (six pounds was got from my small patch, and few original tussocks unremoved,) I did not try it for soiling, or for hay—except throwing occasionally a few dryish blades of that going to seed, to horses and oxen, which were eaten with avidity.

Last fall I took up the stools, not before removed, and as above described, dividing them and some others procured, increased my patch to about half an acre; by further transplanting I had the curiosity to count the divided ones, or rooted sets from one stool or tussock, that had stood two years, and found the number *two hundred and forty*.

As I have often profitted by seeing in detail, how the business of transplanting any sort of vegetable is done, I will here relate my manner with the Gama Grass sets. The ground having been previously enriched and mellowed thoroughly, I ran a plough,—we call a half share here,—and opened furrows two feet apart; and then, having a small short handled hoe in one hand;

a boy from a basket handed me single plants, and I laid the roots of each one along in the furrow, and with the hoe covered them, and gently tramping on, planting about two feet asunder. A man and small boy in this way, may soon plant an acre. As the plants are to be cultivated but one way, the exact distance in the drill, is of no great moment, and can be regulated by the judgment of the planter. I have seen it recently recommended to plant a foot and half each way. When the supply of this wonderful plant reaches the demand, it may not be amiss to plant this closer distance, as the grass will soon take complete possession of the ground; yet from my experience and observation, I should judge that at two feet distance, with proper preparation and care, in three years, at most, the ground will be completely covered or matted over, and yield its full and superabundant crop. I have said *wonderful* and *superabundant* crop; for nothing of the grass creation has ever been known, I believe, to yield any thing like *this*. Take *half* the product of hay it has been known to yield a season per acre, under most favorable circumstances, viz:—*thirty-two tons, or sixty-four loads*, and where is there any crop to be compared to it? Its ascertained yield seems incredible—but so would seem the greatly *accelerated expedition* of steam boats and rail roads. Some years ago, a calculation of their expeditions and facilities of conveyance, would have been viewed as the highest degree *chimerical*. So this wonder of production in the vegetable kingdom is still viewed by some. But “facts are stubborn things,” and will overcome improper incredulity. Is it said that this very great yield may be attended with some expenditure of time, and money in particular? It may be replied, that in the attainment of any valuable object, the necessary trouble is not so much to be regarded, as the after advantages to be realized; and that, frequently these after advantages, are in proportion to the trouble and expenses incurred. The wealth accruing from steam boats and rail roads, would never have been realized, had their cost been chiefly regarded. Some may form erroneous notions from the accounts of the yield of this grass, and suppose, perhaps, that ground unsustained, or indifferent land, unaided by manures, may be made to yield the wonderful product of the Gama Grass. But grounds not abundantly rich require sustaining or keeping up by dressings of composts to produce three or four tons only a year of other kinds of hay. But set with the Gama Grass, *one* acre will yield more provender than *many* in other culture. And that *one* perhaps, requiring no more cost of preparation than *one* in the other case. I have tried cultivating the Lucerne, and have now a flourishing lot of it; but being a tender plant, it is constantly liable to be injured by weeds and native grasses; and in our country, where labor is high, is less profitable on that account. But while Gama Grass is perfectly hardy against summer droughts and winter frosts, it also, when once in possession of the soil, maintains its hold and abundant yield—I say abundant yield, *provided*—“What *provided*,” or always some *if*, or some *requisite* to every boasted *new thing*, or improvement. I seem to hear one say, that would *reap* without *sowing*, or would *otherwise* live than by the “sweat of the brow.” I would reply to such a

one—what, if it be *provided* occasional top dressings of composts or manures are requisite to the astonishing product of the Gama Grass? It is inconsistent to expect that any ground should be always *giving* and receiving nothing in *return*; especially giving so enormously as *scores* of tons per year to the acre; or *one* acre only yielding enough to keep a tolerable large stock of cattle.

We in this country—especially in the more southern parts of it, were peculiarly difficult to have good stock, ought to be thankful and bless heaven, that the great *desideratum* is found, viz: a kind of grass, that, by suitable pains-taking, or by labor, producing the greatest possible effect, may make our land *equal* to any in *riches* of cattle.

Very respectfully, yours, &c.

SIDNEY WELLER.

Brinkleyville, Halifax county, N. Carolina, February 25th, 1836.

Magnolia, Feb. 26, 1836.

To the editor of the Farmer and Gardener.

In one of your numbers of the Farmer and Gardener, I observed a receipt for making shoes and boots water proof by rubbing them with Gum Elastic in Seneca oil—you also recommended it for the preservation of harness. Living in the country, and of course being exposed to much changeable weather, was induced to try the efficacy of the mixture on my boots. I procured the Gum Elastic—cut it up into fine small shreds, and put it into a tin canister, with the proportions which you recommend, but I find that the gum remains exactly as I put it into the oil—not a particle (that I can discover) dissolved. The only way in which I can account for this, is, that the oil which I procured was a *genuine* article, procured from one of the southern Lakes in the usual way—there is, however, a spurious article, which I believe to be composed of common tar and turpentine, with only enough of the genuine article to give it the smell and appearance of Seneca oil. I know that turpentine will hold a large proportion of Gum Elastic in solution. I should therefore suppose that the manufactured, or spurious oil would have a much better effect than the other. As dry feet conduce much to comfort, and perhaps more to health, I would like to hear from your correspondent which of the two kinds of oil he made use of, in order that I may try the experiment still further.

Yours, very respectfully,

M——.

Reply by the Editor of the Farmer & Gardener.

The oil used by us has always been the pure, unadulterated Seneca oil, and we have never failed to dissolve the Gum Elastic in forty-eight hours. We rather think that our correspondent M., has been so unfortunate as to get hold of the compound of which he speaks, or possibly the gas-tar, which has an aroma very like the Seneca oil.

§ Mr. Samuel Carr of this county, informs us, that he raised a potato of the Meshanic kind, on his farm on Jersey Ridge, this season, which weighed 4 lbs!! and that four persons were present when it was weighed.—Maysville Monitor.

WEEDS.—Weeds exhaust the fertility of the soil as much as cultivated plants. Though it may be too late to prevent their growth the present season, it is not too late to destroy the seeds of many which have been permitted to attain maturity, and the labor of doing this, will be amply repaid another season, in the comparative cleanliness of our gardens and fields. It is particularly the fault of farmers to neglect their gardens after mid-summer, and to suffer them to be overgrown by rank weeds whose seeds multiply a hundred fold. A day or two employed in the early part of the present month, in collecting them from the garden and fields, will be profitably spent. They may be thrown into the cow-yard or a dung pile; where fermentation will generally destroy their vitality before the dung is carried to the field in the spring. They had better be collected and burnt than suffered to spread their seeds over the farm.—Albany Cultivator for Oct.

THE CULTURE OF HOPS—Iron rods have been lately substituted for hop poles, in several parts of England, with very remarkable success. Under this system the rapid growth of the vine, particularly after the passing of the thunder clouds, is quite surprising, the plants are perfectly free from mould, rust, the fly, &c., the crop proves weighty and abundant, exhibits a beautiful color, and ripens much earlier than when trailed in the usual way. The rods should be pointed, in order more effectually to attract the electric fluid, to the agency of which in producing vegetation these results are attributable. From the superior durability of the material the improvement is considered to be also a saving. In England, where whole counties are devoted to the culture of the hop, this discovery is of immense importance; and is not without its value here.

INDEPENDENCE OF THE FARMER—The merchant or manufacturer may be robbed of the reward of his labor, by the changes of the foreign or domestic market entirely beyond his control, and may wind up a year, in which he had done every thing which intelligence and industry could do to insure success, not only without profit, but with an actual diminution of capital. The strong arm of mechanic industry may be enfeebled or paralyzed by the prostration of those manufacturing or commercial interests to whose existence it so essentially contributes, and on whom in turn it so essentially depends. But what has the intelligent and industrious farmer to fear? His capital is invested in the solid ground, he draws on a fund which from time immemorial, has never failed to honor all justice demands; his profits may be diminished indeed but never wholly suspended: his success depends on no mere earthly guarantee, but on the assurance of that great and beneficent Being who has declared that while the earth endureth, seed time and harvest shall not cease.

Large Cabbage.—The largest cabbage in the world has been raised by Mr. Geo. Frost, in his garden in the village of Ithica, in the state of N. Y. It weighs thirty and a half pounds! Another in the same garden measured eleven feet six and a half inches in circumference.

PROFESSOR DUCATEL'S GEOLOGICAL REPORT.

To his Excellency, James Thomas, Governor of Maryland.

In pursuance of the duties assigned to the geologist of the state, the undersigned, acting in that capacity, has the honor of submitting to your excellency the result of his researches the past year.

It will be remembered that the final intention of the survey is, to furnish to the officer now engaged in preparing a topographical and geographical map of the state, on the accomplishment of his work, with a complete and minute geological account of the whole state, which will enable him to indicate upon the New Map the localities of valuable mineral deposits, as well as to exhibit correctly, the limits of the different geological formations, that compose the territory of Maryland.—Accordingly, the undersigned has never lost sight of this final object of his investigations, so that it has been his constant care to collect as much information in this respect as possible: and he flatters himself that he has succeeded in acquiring all the knowledge desirable, of such portions of the state as have been already traversed, and over which geological surveys have been completed. But it cannot be expected of him to make those results fully known at present, because there remains another important step to be taken, namely: to connect the results of observations made in one section of the country, with those in another; by which many generalities of consequence may be extended, corrected, improved, or modified. It is not necessary to be conversant, with the subject, to perceive the necessity of becoming well acquainted with every part of a system of formations, before any comprehensive description of such a system can be given. Nor has it been in the power of the geologist, to adopt and pursue a plan of operations more in accordance than the one he has followed, with this apparently most desirable mode of proceeding; his instructions having been virtually, to cause the strict demands of science to yield to the paramount considerations of public favor and utility. Hence it has not unfrequently happened, that whilst pursuing with great personal interest, a series of observations, a sense of public duty, and a desire to render more immediately available some important suggestion, have compelled him to obey calls upon him to set on foot new inquiries into other districts. Thus, whilst endeavoring to determine the exact limits of the three tertiary periods that occur within our territory, and partly extend over both shores of the Chesapeake bay, having received specimens of a valuable material, forming part of the secondary formations, it was deemed advisable to repair to this new field of interest, to expedite the benefit that might be derived from the discovery; some advantage being moreover expected, by directing the researches of those interested in it, preparatory to the future more minute investigations.

For these reasons, no attempt is yet made to assign the precise limits of the tertiary deposit in Maryland: but in reference to the determinations already made by an experienced naturalist of a neighboring city, (Mr. Conrad, of Philadelphia,) it may be well to remark that the *eo-*

or oldest of the tertiary periods, observed by him at Fort Washington on the Potomac, at Piscatawa and at Upper Marlborough on the Western Branch of the Patuxent, has been traced to the main branch of the same river, at Queen Ann, and crossing South river it has been found to reach within six miles of Annapolis. In an essay, entitled "Observations on a portion of the Atlantic Tertiary Region," published in the transactions of the Geological Society of Pennsylvania, Mr. Conrad remarks: "It has been stated by Prof. Ducatel, that green sand, of the age of the New Jersey marl, exists in Maryland; but I believe that, so far as organic remains will determine the point, it will all prove to be of lower tertiary origin." This stricture, it is presumed, can only be intended to refer to what was stated in the report of last year, as to the occurrence of a formation in Charles county, answering in almost every respect to the description given by Prof. Rogers of one in Virginia, which was referred by that gentleman to the period in question—one of the characteristic fossils of the formation being the *gryphæa vomer*. In speaking of the deposit at Upper Marlborough, Mr. Conrad says: "The only secondary species (of shells) observed here, is the *gryphæa vomer*. (Morton,) but as the matrix is merely the detritus of the secondary green sand, it may be entirely accidental," &c. It remains then to be determined how many occurrences of the kind are to be deemed mere accidents: but there can be no objection for the present, to accede to Mr. Conrad's views, and accordingly the formation in Charles county is referred, on the Map B. accompanying this report, to the *eo-*cene period, and is designated as *Eocene marl containing green particles*. The occurrence of green sand "of the age of the New Jersey marl," in Maryland, has since been satisfactorily ascertained. It is found in Kent and Cecil counties at the head of the Sassafras river: and determining from mineralogical characters, the deposits at, and around Annapolis, are confidently referred, as Mr. Morton had been previously led to do from information, to the same epoch. It is moreover believed that some of the members of the green sand formation have been discovered in the Potomac counties of the State, intimately associated with deposits usually referred to a more recent period. But we should be cautious not to arrive at general conclusions too hastily.

As stated in the report of last year, no deposits of the *miocene* period have so far been discovered in Maryland. The fossil deposits of the *older pliocene* formation are found in the greatest abundance in St. Mary's and Calvert counties, on the Western Shore of the Chesapeake bay. They are in the greater portion of this district, covered by a thick bed of diluvial gravel and sand, but never fail to make their appearance in the deep ravines that intersect the country bordering in St. Mary's county, on the Patuxent. They may be said to form the substratum indeed, of this county on the Potomac side, from the Wicomico to the St. Mary's river; and on the Patuxent side, from Benedict to Town Creek. In Calvert county, from the Cliffs to Plumb Point, we find an almost uninterrupted deposit of the older *pliocene* marls. Those of the Eastern

Shore of Maryland, were described in last year's report, as occurring in numerous localities between the Chester and the Choptank.

Mr. Conrad refers the deposit near the mouth of the Potomac, at Cornfield Point, to the *newer pliocene* era, as also one at Easton, on the Eastern Shore. A third deposit of the same period, occurs at the head of tide, on the north-west fork of the Nanticoke, forming the extreme southern limit of the fossiliferous deposits above tide, on the east side of the Chesapeake bay.

Until further information be obtained, and the geography of the country more especially determined, it is not thought advisable to assign the limits of the geological formations of Maryland, even as far as these appear to have been ascertained. The subjects of interest growing out of the survey refer at present to the resources of any kind that present themselves, and are of importance to be known, not only to those who possess them, but to the citizens of the state at large. It was one of the principal objects of those who projected the survey, and it seems also to have been the intention of the enlightened legislature which ordered it, that it should be the means of developing all the advantages, and the whole riches of the state, for the benefit of every portion of her population. In this spirit, the officers charged with the undertaking have sought to collect information on every subject connected with the physical geography of the country. Whilst endeavoring to pursue their researches accordingly to the true principles of scientific investigation, they could not be satisfied with merely stating the result of their labors, without pointing out the uses that may be made of them, as subservient to the various interests of their fellow-citizens. The reports which they are called upon annually to submit could not be satisfactory, did they relate solely to an announcement of the progress of their work. The account must embrace considerations of practical utility, immediately or remotely applicable. And viewing the project as a comprehensive scheme of internal improvement, they are proud to have it in their power to devote all their energies to its completion; venturing to assert, that when the task is accomplished, the advantages accruing from it, in the very nature of the work, will become manifest to every one. The reports of the preceding year were drawn out in this spirit; that of the present is respectfully submitted, under the same impression of superior individual and public good, consequent upon such a course.

In giving an account of the researches of the past season, the subject will be divided in reference to the districts of country that have been examined, beginning with the southern counties on the Eastern Shore of Maryland.

SEC. 1. Geological examination of Dorchester, Somerset, and Worcester counties, on the Eastern Shore of Maryland.

These three counties, comprising more than one-third of the territory of Maryland, east of the Chesapeake bay, though presenting but little variety in their mineralogical and geological features, are yet not devoid of interest in these respects, while in others they offer subjects of consideration of the deepest importance to the prosperity of the state.

The most prominent geological feature in this district is a succession of sandy hillocks, in what are termed the upper portions of these counties, being a continuation of the ridge dividing the courses of the waters that empty themselves to the east into the bay of Delaware, and to the west into the Chesapeake. These hills of sand are themselves arranged in ridges, running generally north-east and south-west, diminishing in elevation towards the southern extremity to the peninsula, forming a curve on its eastern boundary, and presenting every appearance of a series of sandy beaches produced by successive retreats of an ocean. No organic remains of any kind are known to have been found within this portion of our territory, excepting a deposit of oyster shells at the head of Taylor's creek, two miles above the fork of Nanticoke, and ten miles below the fossiliferous deposit occurring on the north-west branch of this river, and previously referred to the newer pliocene formation. This deposit is overlaid by soil six feet in depth. The shells contained in it are much in the same condition as those occurring in the accumulations supposed to have been made by the aboriginal inhabitants of the country; *i. e.* the valves are separated, and are not, so far as perceived, associated with any other marine shells. They are, however, perforated and covered with *surpula*, as if they had lain long, after the death of their inhabitants, at the bottom of the sea. But they are at a great distance from any actual oyster beds, and are in a more advanced state of disintegration than the fossil oysters heretofore observed; whilst, on the other hand, they are covered, as aforesaid, by a thick stratum of sand, no where else remarked to overlie Indian banks.

The lower portion of the peninsula lying in Maryland, embracing Dorchester, Somerset, and Worcester, is a low level country, mostly a deposit of stiff clay, excepting on the margin of the rivers and creeks, where the country is wavy and the soil sandy. The sand hills, on the borders of the rivers, are always situated on their south or south-eastern sides, and extend but a short distance inland. In some instances they form distinct ridges or waves of sand, running in various directions; sometimes parallel with the course of the river, and when occurring at the extremity of necks, transversely, or across the points. The intervening necks, sloping gently to the south and south-east, terminate in extensive marshes, which in high tides are frequently entirely submerged. In the midst of these marshes there are occasional sand hills, or hammocks; but rarely of any great extent.

The sameness in the geological constitution of the necks of land, just referred to, is evinced in the digging of wells, from which this section of country is exclusively supplied with water for domestic purposes. At a depth of from ten to twelve feet, penetrating through the stiff clay, there is invariably encountered a stratum of clean white sand, with gravel, varying from one to two or three feet in thickness. Out of this an abundant supply of good water can be obtained; but beneath there is always found a soft black mud, with an offensive odor, and filled with decayed vegetable matter, composed principally of a coarse grass, similar to that growing upon the

present marshes. In some places this mud is reported to be of great depth. It does not appear, however, to have ever been accurately sounded, but in one instance, already alluded to in a previous report, at Cambridge, it was traversed; and is stated to have been found overlying a fossil deposit, the shells of which are referrible to the older pliocene marls.

Another remarkable feature in the geology of this country is the occurrence of a ledge of water-worn stones, composed of quartz and sandstone, constituting gravel and boulders of various sizes, from twenty to several hundred pounds in weight. These stones were first observed between Todd's point and the head of Little Choptank; they were afterwards found scattered over a narrow zone of land, between Monie creek and the Manokin. They are said to occur at the head of Back creek, on the south side of Manokin, and were finally again observed near the mouth of Marumsco creek, on Pocomoke bay. At this last mentioned spot,—being a knoll of dry ground in the marshes, protruding into the bay—the beach is covered with these stones, washed out of the bank. All of them are a close grain sandstone, with small veins of quartz, the sandstone being of the character of that occurring on the Blue ridge, different from that constituting the *white rocks* at the mouth of Patapsco, but similar to those larger masses that are found strewn over the surface in the upper part of the Eastern Shore of Maryland, in Cecil county. These erratic masses form, with the exception of the bog iron ore,—which will be presently more particularly referred to,—the only stony bodies that occur in the three Eastern Shore counties, now under examination.*

Such are the great geological features of this section of country. A more detailed account of its physical geography will now be given under separate heads, for each of the three counties embraced within it.

Dorchester county, lying between the Choptank and Nanticoke rivers, requires perhaps more than any other on the Eastern Shore, the assistance which would necessarily be afforded by an accurate topographical survey, in adopting measures to bring into operation her natural resources. Placed between two large rivers, her facilities for sending the produce of her soil to a market are yet not great, and mostly confined to the least productive part of her territory. The central portion of the county, most susceptible of great and permanent improvement, and even at this time the most productive, is deprived of an outlet for her agricultural staples, corn and wheat; and the no less valuable source of wealth, which she possesses, in her magnificent growth of timber. The natural channels of egress through the Blackwater and Transquaking have long since failed to be available in any thing more than a limited degree, these rivers serving now rather to increase the obstacles to the navigation of the bay into which they empty. Fishing bay, their common estuary, offers scarcely more than five feet of water, at high tides, over a deep and

* A ledge of submarine rocks is said to be off Todd's point; and another off Benoni's point, on the Talbot side of the Choptank.

extensive mud flat, which it is utterly impracticable to remove. The inconvenience arising from this cause is felt by a large portion of the country, and has suggested the application to the Legislature, for the opening of a canal communication between the Blackwater and the Choptank. Such a canal would but partially remedy the inconvenience, whilst a more comprehensive view of the benefit to be derived, points to the practicability of connecting the Nanticoke with the Choptank. This is believed to be entirely practicable, and the advantages to be obtained from the connection of these two rivers by means of a canal, traversing the heads of navigation of the Blackwater, Transquaking and Chicamacomico,—a project to be effected at a trifling expense,—are great and obvious. A communication of this kind would not only furnish an outlet for the already valuable products of the county, but could be used as a means of conveying to it those materials, such as marl, lime, &c. (of which an abundance would be thus brought within a convenient reach) that are necessary in order to enhance the productiveness of its soil, and bring it into that state of improvement of which it is susceptible. Other advantages may be expected to accrue from the excavation of a canal in the direction just referred to; among which, not the least important would be to render it subservient to the effectual and thorough drainage of a large extent of country, at present uncultivated, and not only itself insalubrious, but the main cause of the unhealthiness of that by which it is surrounded. It would seem to be at all times a subject worthy of the attention of a government that wishes to increase the quantity of nutriment, as well as to improve the salubrity of the country, and consequently to augment its population and prosperity, to employ suitable means to effect a complete drainage of every morassy district, within its dominion, of whatever extent. In the present case the proposed improvement forms, however, only part of a scheme of internal navigation that might, it is believed, be advantageously pursued for the benefit of a large portion of the Eastern Shore of Maryland.

In the upper part of Dorchester county the soil is mostly a sandy loam, well adapted, with proper management, to the growth of corn, rye and oats. This character of soil belongs more especially to those portions lying on the rivers, and extends, with a very few exceptions, over a narrow slip of land on the Choptank, as far as Hill's Point, on the bay shore. The neck between the Big and Little Choptank is a low flat country, mostly composed of a stiff clay soil, covered with a plentiful growth of pine, sweetgum, oak and dogwood, but suffering greatly from a want of convenient drainage; an evil that might be remedied, and by which thousands of acres of land, now of little value, would be reclaimed and rendered fit for cultivation. With the advantages possessed by this section of country, in her now extensive deposits of shells on the river banks, her sea-ooze, together with her proximity, and easy access to the marl deposits of Talbot county, it ought to become one of the most productive and flourishing portions of the state.

The necks and inlands, forming the western

and southern portions of the country, likewise present us with low and level lands and a stiff clay soil, mostly well timbered with pine, white, black, and willow oak, sweet-gum, &c. The situations on the islands are delightful and generally reputed healthy.

Meekin's Neck, on the bay shore, is marshy, and this is the case of nearly one half of Hooper's Island, the extent of which is nearly fourteen miles in length, and from one to two in breadth; such portions of the island as are arable have a productive soil. At the head of Hon-ga river and bay, there are extensive meadows; and where the soil, also a clayey loam, is cultivated, it is said, to yield abundantly. Bishops-head Neck offers the same character of soil and physical aspect. Throughout the whole of this district the depth of wells is rarely found to exceed ten feet, penetrating the clay to sand, from which the water issues, seldom perfectly clear, and occasionally slightly brackish.

At the heads of big and little Blackwater rivers there are also extensive marshes; the country is very level, low and swampy; the soil a stiff clay; timber principally oaks and sweet-gum. Between the Blackwater and Transquaking, around Buckstown, the country is more elevated, the soil lighter, with a growth of very large oaks and American poplars. The wells here are sunk to the depth of 12 feet, through clay, reaching gravel and sand.

Towards the head of the Transquaking, and between it and the Chicamacomico, the soil is a clay-loam, that would yield very good crops of grain, if properly improved. Beyond the Chicamacomico the country is more uneven, the soil lighter, sometimes sandy, the level of the country rising towards Vienna. Wherever the soil is stiff it is covered by a heavy growth of oaks and gum.

Hurley's Neck, along the Nanticoke, south of Vienna, is a level stiff clay, well wooded, for the distance of about seven miles, after which it terminates in an extensive marsh.

No fossil deposits, similar to those occurring so abundantly north of the Choptank, have been discovered in Dorchester county that would answer for agricultural purposes, but the large accumulations of shells found at Horn Point, at Oyster-shell Point, and other places, together with the deposit on Taylor's creek already referred to, might be made eminently serviceable if burnt into lime. The only mineral formations of any value are the deposits of bog-ore, at the heads of Transquaking and Chicamacomico, and on Reedy creek, in the vicinity of Federalburgh. This ore is compact, heavy, free from phosphate of iron, and would probably yield from 40 to 50 per cent. of good metal. Some inclination having been manifested by an enterprising proprietor, of an extensive deposit of ore, on the Chicamacomico, to work it in place, it was thought more advisable to recommend that it should be forwarded to the Baltimore market, where it would probably command from \$3 to \$4 a ton.

(To be concluded.)

GAMA GRASS ROOTS.

5000 Gama Grass roots will be received, and for sale about the 20th of March. By obtaining roots of this valuable grass, farmers will gain the advantage of two years over seed plantation.

March 1

ROBT. SINCLAIR.



FIELD & GARDEN SEEDS, &c.

WARRANTED GROWTH, 1835.

THE subscriber has just received and is now opening a large and superior assortment of GARDEN and RARE FIELD seeds, growth 1835.

All those seeds which can be raised to advantage in this country, are saved by careful seed raisers at the *Clairmont Seed Gardens*, near this city. Seeds which are found necessary to import are principally from the south of Europe, where they become so well matured, that their vitality is preserved much longer than those obtained from the humid climate of England.

Of the endless variety of *Cabbages, Lettuce, Peas, Beans, Cucumbers, &c.*, none are retained but such as are known to be truly excellent.

The most prominent seeds received, and in store, are 250 bushels *Garden Peas* of various sorts.

95 bushels *Dwarf and Pole Beans*.

2000 lbs. *Cabbage Seeds*. About 35 fine sorts, among which are the *Scotch Early York, London Battersea, Flat Dutch, Globe Savoy, Early Harvest, &c.*

150 lbs. *Cucumber seed*, about 12 sorts, among which are *Keene's Long Green, Long Green Turkey, &c.*

1800 lbs. *Radish seeds*—principally of *Short top Scarlet, Yellow and Red Turnip*.

300 lbs. *Beet and Mangel wurzel seed*.

50 lbs. *Green Curled Borecole*, or *Scotch Kale*, purple curled—blue curled, &c.

35 lbs. *Cauliflower and Broccoli*—best European sorts.

200 lbs. *Carrot seed*—for garden and field.

75 lbs. *Lettuce seed*—the curled *Silecia*, large white or Lazy, brown Dutch and Malta, are best sorts, the latter particularly fine for forcing.

270 lbs. *Onion seed*—several French and American sorts.

Also—*Tart Rhubarb seed, Tomato, Egg plant, Squash, Black and Orange Salsafy, Spinach, Peppers, Ockra, Flag Leek, Cress, Celery, Endive, &c.*

FIELD SEED.

60 bush. *English and Italian Rye grass seed*.

50 do *Green Sward grass*, for yards, &c.

1,200 lbs. *Scarlet Trefoil or clover, Trifolium Incarnatum*.

800 lbs. *Lucerne or French clover*.

50 bush. *English and Poland oats*.

250 lbs. *Skinless or Huskless oats*—new—great product.

150 bush. best *English and American Early Potatoes*.

100 lbs. *Gama Grass seed*—this grass bears cutting every 15 days, and of course the product is immense.

50 bush. *White and Yellow Field corn*.

ROBERT SINCLAIR, Seedsman,
Light st. near Pratt.

March 8

5t

A GARDENER.

A person possessing a general knowledge of gardening in all its branches, and of farming, is desirous of obtaining a situation in the above capacity. He can give the best recommendation as to character and capacity—Address applications to W. B. through the editor of this paper. All applications by letter to be post paid.

mar 8

RUFFLE OATS,

For seed, may be had at the Maryland Agricultural Repository, Light street, Baltimore, by application to Dec. 8 JAMES MOORE.

CONTENTS OF THIS NUMBER.

Notices—of Messrs. Prince's communication on the propagation of morus multicaulis by seed—of the Westchester silk company—of the New York agricultural convention—of the Greville rose—underdraining of clay lands—description of a cheap boiling apparatus—Norfolk agricultural society—Notice of professor Ducatel's report—the Messrs. Prince on morus multicaulis—Mr. Weller on Gama Grass—water proof mixture—large potato—destruction of weeds—new mode of cultivating hops—independence of the farmer—large cabbage—professor Ducatel's geological report—advertisements.

AGRICULTURAL IMPLEMENTS, GRASS SEEDS, &c.

JAMES MOORE, successor of Sinclair & Moore, Light street near Pratt, tenders his thanks to the agricultural community, for the liberal patronage heretofore afforded to the Maryland Agricultural Repository, and respectfully invites the attention of farmers and others, to his stock of articles now on hand, comprising a large assortment of PLOUGHS of the most approved patterns, both wrought and cast shears, and of sizes adapted to all the purposes of agriculture—also Hill side and double mould board ploughs.

Corn cultivators of different kinds, those with five wrought tines generally preferred: Harrows of different shapes and sizes

Corn shellers, the usefulness of which has been fully attested, and the increased sales of the last year, together with the many impressions of their utility, by those who use them, give evidence of their excellence—price \$20. Subject to a discount of 5 per cent for cash payment.—Price from \$15 to \$30. Improved Wheat Fans, of different sizes.

Cylindrical Straw cutters, a superior article for cutting any kind of long forage, 20 inch boxes adapted to horse power, \$75—extra knives per set \$6. 14 inch box adapted to manual power \$45—extra knives \$5 per set. 11 inch box which has some recent improvements \$30—extra knives, \$3 per set. Common dutch straw cutters from \$5 to \$7 50.

Garden and Field Tools, such as spades, shovels, hedge shears, mattocks, grubbing hoes, pruning tools, and hoes in a variety of forms, &c. Cast steel axes, warranted, Wove wire for screens, fans, cellar windows, safes, &c. Cotton Gins made to order—Grain Cradles—Harvest tools in their season.

Machines for sowing clover seed, which distribute the seed with regularity over a space of 12 feet at a time.

Having an *Iron Foundry* attached to this establishment, extra castings for ploughs of all kinds, Threshing machines, Horse powers, Mill work, window weights, &c. can be furnished or made to order of the best quality and at moderate prices.

FIELD SEEDS.

Orchard grass, Herds grass, Tall meadow oat grass.—Timothy and Clover; also on hand a lot of Ruffle oats.—Buckwheat, Millet, &c.

Retail sales mostly confined to town acceptances, or to cash for which a discount will be made on implements. March 8th.

IMPROVED DURHAM STOCK.

THE editor of the *Farmer and Gardener* has for sale the following valuable stock:

The bull *Brilliant*, a large sized animal of the Improved Durham Short-horn breed. He is red and white; was got in England, and calved in Frederick county, Md., on the 12th May, 1829, and now rising 6 years old. His dam was Matchless, got by Favorite, (purchased at the sale of the late R. Colling, a celebrated breeder) son of Favorite, dam by H. Allison's Gray bull, sire Orlando, that died on the passage from Liverpool, out of Rosina, from Yorkshire, that gained the highest prize premium of ten sovereigns at a Cattle show in Manchester, England.

His price is \$200.

The bull *President*, son of *Brilliant*, out of an imported full blood Durham short-horn cow: he is rising 3 years.

His price is \$250.

A beautiful milk white heifer, out of the dam of *President*, got by a full blooded bull of the Hon. Charles A. Barnitz, of York, Pa. She is a remarkably large animal, of fine form for milking, and is now in calf by *Brilliant*.

Her price is \$300.

A two year old heifer, out of the imported cow, the sire of *Brilliant*, and got by the latter. Her price is \$150. 2 3-4 blooded bull calves of the same family, 2 months old. Prices \$30 and \$25.

He has also for sale, 2 full blooded *Saxony RAMS*, and 2 3-4 blooded do. These sheep are of a family, remarkable for their fine fleece, their wool always commanding the best prices in the market. march 1

TO AGRICULTURISTS—The analysis of Soil-marls, mineral waters, and other productions, interesting those engaged in Agricultural pursuits, is performed with promptness and accuracy, by

TYSON & FISHER, Chemists,
St Druggists, No. 192 Market street, Baltimore.



DUTCH BULBOUS FLOWER ROOTS.

THE following list of Bulbous roots, are just received in good order after a tedious voyage of six months. They were selected by an eminent Dutch Florist, for my special retail sales, and comprise the finest kinds. Gentlemen wishing to stock their gardens with superior flower roots, will do well to call and examine them.

The proper time for planting most bulbs, is during the fall months—but if carefully planted, particularly the Hyacinth, they will flower well if planted as late as the last of March. The different species of Amaryllis, *Terraria Tigrida* or Tiger flower, and other delicate bulbs should be planted during the months of April and May. They are as follows:

80 varieties of *Single and Double Hyacinths*.
78 do *Early Bybloem, Bizarres, Double Parrot, and Duc Van Thol Tulips*.

Crocus, 8 colours; *Anemone*, 12 sorts; *Narcissus*, single and double; *Arum Dracunculus* or Dragon plant; *Jonquill's*, *Crown Imperials*, *Fritillaries*, *Iris* or *Flower de Luce*, *Terraria Tigrida* or Mexican Tiger Flower, 25 sorts *Amaryllis*, *Galanthus*, *Pon Cratium Lily*, *Commosus*, and 300 roots *Jacobian Lily*, *Amaryllis Formosissima*.

ALSO

300 sorts *Double Dahlia roots*, will be in store early this spring, comprising all the finest and most admired kinds.

ROBT. SINCLAIR, Jr.

Light, near Pratt st. wharf.

March 8

2t

NEW AND SUPERIOR VARIETIES OF VEGETABLES.

EARLY white flageolet Bush Beans, *earliest of all*, and excellent.

Dwarf white Soissons do very productive and nearly stringless.

French straw colored Dwarf do extra early, and very productive.

Large white Soissons pole Beans, excellent green, and when dry equal to the Lima, much earlier and far more productive.

Early Primitive Pea, *earliest of all*.

Keen's Seedling Pea, *extra early*.

Early Warwick do *extra early*.

Dwarf Green Marrow or Waterloo Blue do. *very fine*.

Groom's superb dwarf Blue Pea,

New Grotto marrow do *superior*.

Knight's tall and dwarf green marrow Pea

Early white Sugar Beet, *sweetest of all*.

Earliest French Cabbage.

Arklies early dwarf cabbage, *extra early*.

Early Emperor do *very fine and early*.

Bonneuil cabbage, *monstrous heads and finest for autumn*.

Green Pancalier Savoy, *finest of the Savoy*s.

Quintal, *largest for winter, for table or cattle*.

Long white Carrot, *sweetest of all*.

Large solid violet Celery, *forms strongest stalks*.

French green table Cucumbers, *medium size but very productive*.

Spanish long green do *some measured 22 to 24 inches the past season*.

Long Ridge or hand glass Cucumber.

Piedmont yellow six weeks corn, *earliest of all*.

Moore's early Yellow, do *very early*.

Early curled Silesia Lettuce or curled Ice.

Naples curled Cabbage do *very large, superior, and of beautiful appearance*.

Large Calais Cabbage do *large heads & very fine*.

Large French Blonde Cast do *superior*.

Green fleshed netted Romana Melon, *large and superior*.

French Muscade Melon, *green fleshed and fine*.

Imperial Melon, *rose colored flesh*.

Malta Winter do. *very solid, green fleshed, and keeps till February, and above 20 other fine new varieties*.

Early Lilac skinned Onion, *new and earliest of all the white varieties*.

Early Red Madiera do *earliest of all the red varieties*.

Two bladed Onion.

Early turnip rooted Parsnip.

Yellow Tomato shaped Pepper.

Spanish cheese Pumpkin, *very solid and superior*.

Seven Years or long keeping.

Earliest French Scarlet Radish, *extra early*.

Flanders large leaved Spinach.

Monstrous bush Squash for summer.

White Cusshaw do for autumn.

Large Teneriffe, do keeps till March and makes very superior pies.

Yellow Altringham Turnip, *superior*.

White Swedish Turnip, *devoid of the pumpkin flavor and more delicate than the yellow variety*.

Berlin or Teltau Turnip, *par excellent*.

This list embraces but a few of the newest varieties.

§ All applications to be made direct per mail, and priced catalogues will be sent gratis to all who desire them. The stock of seeds is the most extensive in America, and the prices in quantity to venders are very moderate, and a convenient credit will be allowed—of Flower seeds above 600 varieties.

WM. PRINCE & SONS.

Linnæan Garden & Nurseries—Flushing, near N. Y. March 8

1t

500,000 SILKWORM EGGS.

THE subscriber offers for sale 500,000 Silkworm Eggs low to close sales.

JAMES MOORE;

Agricultural Repository, Light, near Pratt st.

March 8.

BARNITZ'S BREED OF HOGS.

WITHIN a few days, four of my sows of the above breed have got fine healthy litters of pigs, and appear as if they would do credit to that celebrated breed, and will be ready to deliver to order the latter part of April. Price \$10 a pair.

ROBT. SINCLAIR,

Clairmont Nursery, near Baltimore.

TREES—SEEDS, &c.

100 LBS. White Italian Mulberry Seed, direct from the most celebrated Silk Districts in Italy.

75 lbs. White Mulberry Seed of American growth.

60,000 Chinese Mulberry cuttings perfectly prepared for planting.

2,500 Chinese Mulberries, of large size, 900 of which are inoculated on the white mulberry, which gives them additional hardihood—price \$50 per 100.

These trees were planted in an orchard which it is necessary now to remove.

35,000 Chinese Mulberries of the usual sizes at \$25 to \$30 per 100, and some of larger sizes, at \$37 per 100.

Fruit and Ornamental trees, Green-house Plants, Roses, Bulbous roots, &c. The collection of which is unrivalled, and priced Catalogues of which will be sent to every applicant. Double Dahlias above 500 most splendid varieties, and comprising 200 very rare and superb kinds not to be found elsewhere in the Union.

Garden, agricultural, and flower seeds—an immense collection comprising all the new and rare varieties of vegetables, &c., as will be seen by the catalogue.

20 bushels of the celebrated chevalier Barley.

1,000 lbs. Early Crimson Clover, or Trifolium Incarnatum.

2,000 lbs. White Dutch Clover,

20 bushels Talavera wheat.

10 do Venetian do

100 do Early Angus and Hopetown oats, the latter weighing 44 lbs. per bushel.

160 do Orchard Grass seed.

75 do Tall meadow oats grass.

30 do Italian Rye grass, (very valuable).

100 do Pacey's perennial rye grass.

2,000 lbs. Finest Provence Lucerne.

20 bushels new white Field Beans, (very productive)

300 bushels early Nonpareil, Lancashire Pink Eye,

Taylor's Forty-fold and other celebrated Potatoes.

25 bushels Potato Onions.

Also, Field Burnet, St. Foin or Esparcette, Large Riga Flax, Lentiles, Vetches, Millet, Yellow Clover—a superior large variety of Teazel—2 varieties of Castor Oil—Bean, Weld, Woad, Madder, &c.

Orders sent direct per mail will receive immediate attention, and seeds in quantity will be supplied at very moderate rates.

WM. PRINCE & SONS.

Linnæan Botanic Garden & Nurseries, Flushing near N. Y.

Feb. 23

2t

A DURHAM BULL FOR SALE.

THE editor of the Farmer & Gardener has for sale the beautiful Improved Durham short-horn bull BOS, deliverable in Baltimore, as soon as the navigation between this and the Hudson river is free of ice. He is of good size, was 4 years old last August; his pedigree which will be well authenticated, is as follows:

"His sire *Wye Champion*; his dam *Brinda*. *Wye Champion* was bred by Governor Lloyd, at his Wye-house farm, Md. His sire *Champion*, his dam *Shepherdess*. *Champion* and *Shepherdess* were imported from England, by Mr. Skinner, former editor of the American Farmer, and by him sold to Gov. Lloyd. They were considered so great an acquisition to the country, that Congress remitted the duties on them; and their pedigree are recorded on the last page of the Memoirs of the Pennsylvania Agricultural Society. Gov. Lloyd after keeping them several years sold them to J. H. Powell, Esq. They were bred by Mr. *Champion*, a celebrated breeder in England. *Champion* was by *Warrior*, dam by Mr. Coate's Palm Flower, g. d. by Driffeld—g. g. gd. by Charge's bull of Newton: *Shepherdess* was got by Magnet, dam by Prince; g. d. by the Duke of Leeds' bull Magnet, who was got by *Warrior*, dam *Magdeline*. *Warrior* was got by R. Colling's *Wellington*. *Wellington* by Comet, dam, Wildair. See proceedings of Agricultural Society of Maryland, respecting them in 4th volume American Farmer p. 114.

Brinda was bred by Mr. James Cox, of Pennsylvania. Her sire was *Chester*, dam, *Corinna*. *Corinna* was got by *Bishop*, dam, *Cora*. *Chester* got by Blythe. Blythe out of *Champion* and *Shepherdess*. *Flora* was imported at the same time with *Champion* and *Shepherdess*.—Blythe the last season Mr. Cox had him, went to 95 cows at \$5 each, and sold at the end of the season for \$500." His price is \$225.

§ All letters upon the subject must be post paid. march 1

GAMA GRASS SEED.

JUST received, a fresh supply of Gama Grass Seed. This is the grass that bears cutting every 15 days for soiling, and every thirty days for hay, from the middle of May till frost, say till the middle of November, and has yielded at the rate of 64 tons to the acre under peculiarly favorable circumstances, and from an acre of which 30 tons may be calculated upon. The earlier it is sown in the spring the better.

ROBERT SINCLAIR, Jr.

Maryland Agricultural Repository, Light near

Feb 9

Pratt street.

A BROOD MARE FOR SALE.

A SUBSCRIBER in Virginia writes to us as follows:

"I have a considerable stock of Blood Horses on hand, which would allow me to spare a Brood Mare, by the celebrated *Contention*. Should any gentleman wish to breed from any of the imported or other horses in the south, it would afford a fine opportunity to purchase her and have her served before taking her to the north. She is young, has brought two colts, and can be accompanied by well authenticated testimonials of pedigree, as her sire is well known, and her dam was once owned by Col. Wm. R. Johnson."

Any person desirous of purchasing a Brood Mare of the above description, can be supplied by addressing a letter to the Editor of the Farmer and Gardener—post paid.

Feb. 16.

4t.

THE SILK MANUAL.

JUST published and for sale by Sinclair & Moore and Robt. Sinclair, Jr., at the Maryland Agricultural Repository, Light near Pratt street, Baltimore, a complete *Manual of the Silk Culture*, in which plain instructions are laid down for the culture of the Mulberry, the feeding of the Silk worms, management of the cocoons, reeling, spinning and dying of the Silk. In fine, it is a perfect Manual, and comprises every department of the business. The rules are arranged in so plain and methodical a manner that every one can understand them, and by a very few hours attention become master of the business. It is clearly demonstrated in this Manual, that largely upwards of \$500 may be netted from an acre in the Culture; and it is a singular fact connected with the Mulberry as adapted to the making of Silk, that poor dry, sandy, or gravelly land suits it best, the fabric made from worms fed on leaves raised on such soil, being greatly superior in elasticity and richness of gloss to those grown on rich grounds.

Price—per copy, 50 cents.

Liberal discounts made to the trade.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 46.

BALTIMORE, MD. MARCH 15, 1836.

Vol. II

THIS publication is the *successor* of the late **AMERICAN FARMER.**

and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, MARCH 15, 1836.

The remarks of "*A Farmer*" in another column, are judicious and well timed, and we hope they will elicit the attention of every farmer in the country.

We are truly gratified to learn that he means to experiment upon the corn crop, for it is most obvious, that on an average not one half the quantity of this grain is grown on an acre that ought to be, and we hope that whether successful or not he will favor us with the result.

We have just concluded reading the report of the Committee of Ways and Means made to the House of Delegates of the General Assembly of Maryland, on Wednesday last, on the subject of the finances and internal improvements of the State. It is the production, we learn, of Colonel *William D. Merrick*, of Charles county. In the perusal of this truly able and statesman-like paper, as a Marylander, we felt a conscious pride. The bold and comprehensive views which it takes, the enlarged grasp of thought which it displays, and the enlightened policy which it not only advocates, but illustrates with so much cogency of reasoning, and unanswerable argument, must find admirers in every bosom in which there are either State pride or love of country.

Our columns being previously occupied with the continuation of the report of Professor *Ducatel*, we have not room for this interesting document, and therefore take pleasure in giving place to the very satisfactory *abstract* which preceded its publication in the *American*, and shall have to content ourselves with it for the present; but we cannot, without disobeying the dictates of our own judgment, omit to give the concluding part of Col. *Merrick's* masterly report. It relates to the Agricultural interest, and peculiarly appeals to our feelings and inclination for immediate insertion, and while we feel grateful to the Committee, who have with so much sagacity and be-

coming patriotism, adopted the wise and paternal policy recommended by them; we hope their views will be promptly and honorably sustained by the legislature; for, as is most clearly shown by the paper in question, the time has arrived when action is necessary.

PLASTER OF PARIS.

We continue to day the truly interesting report of Professor *Ducatel*, on the geological and physical resources of Maryland, and we take occasion to call the attention of agriculturists to the following paragraph, which we extract from it. The opinion that the Professor advances, is one we have long entertained, for we never could see any good reason for the belief generally prevailing, that plaster would not act beneficially on lands situated on or in the vicinity of salt water. The *Professor* says:

"Another popular belief, founded upon prejudice is, that plaster will not act upon lands contiguous to salt water. *It is not so.* Lands whether near or remote from the sea, upon which *gypsum* did not seem to take, have been found, after being *marled or limed*, to derive the useful benefits imparted by this valuable material."

TRANSPLANTING.

Each of the two seasons considered most favorable for the transplantation of trees and shrubbery has its advocates. While some well judging persons consider the fall the best—others, with equal claims to knowledge, give the most decided preference to the spring, and we are free to confess, that we incline to the opinion of the latter class. But let whichever season be selected that may, the success of the work will depend much upon the manner of its execution. If the trees or shrubs be well planted and generously supplied with compost or rich mould, protected by a stake from the injurious effects of being shaken by the wind, and the season be congenial, there is little or no danger to be apprehended from their loss. Should the season be one of long continued drought, watering at least twice a week will not only be beneficial, but absolutely necessary to enable the plant to strike root vigorously, and surely no one who can feel sufficient interest to plant out an orchard of fruit trees, or who may

have ambition enough to decorate his pleasure grounds with ornamental trees or shrubbery, would object a moment to the trouble of watering them some four or five times in a season, when by so doing, he would have a certainty of placing their safety upon a sure and solid foundation.

Our object in framing this paragraph is to call the attention of our readers to the fact, that the present is the season for setting out all kinds of fruit trees, shrubbery and bushes, as *apples, pears, peaches, quinces, apricots, plums, raspberries, gooseberries, currants, roses, honeysuckles, jessamines*, and in fine, the whole range of hardy trees and plants of the flowering and ornamental kinds.

THE DAHLIA.

As this is the month in which the bulbs of this exquisitely beautiful flower may be taken from the drawers of their admirers, and transferred to the garden, it may not be amiss to give a few directions with regard to their management; but we will here premise, that the transplantation of the roots should not take place before the latter part of this month, and may be continued till the middle of May, as the weather may indicate and circumstances justify. It has heretofore been the custom in Europe, and indeed, it has not been without its followers in this country, to plant this flower in poor sandy soil, but common sense seems now to be superceding the dictum of custom, and gardeners and amateurs appear to consult nature as their guide. No one who looks at the stalk of one of those magnificent specimens of floral loveliness, can hesitate a moment in arriving at the conclusion, that so much luxuriance cannot be supported unless its juices be drawn from an unstinted source; that so much succulent vegetation can only be sustained by a soil at once rich in all the elements which enter into the food of plants; and it, therefore, follows, that if we desire to have healthful herbage and splendid and long continued bloom, the soil in which the bulb is set must be a good moist sandy loam, of native fertility, enriched with *manure*; and we incline to the belief that it matters not whether it be stable, long half rotted manure, or vegetable mould, so that it be rich, *that* being the point to be considered. If the season be one of drought, the plants should be watered twice or

thrice a week, and always late in the evening. The ground should be dug deep and the bulbs placed one inch below the surface of the earth, at the distance of about 6 feet apart either way, and when the stalks are about 2 feet high, they should be supported with stakes about six feet above, and to be firmly set in the ground.

As to the form in which they are to be set out, that must depend upon the taste and situation of the culturist, and the location of his ground.—Some plant them in squares, while others choose the angular, circular, and semi-circular form: but let them be planted as they may, they are the pride of any garden or yard in which they may be placed. In England they are the decided favorites of every selection, and in our own country, every gentleman and lady of wealth and taste, justly appreciate this most lovely exotic and award to it a congenial location where it may vegetate and display its bloom to the greatest advantage.

If its growth were pushed forward by weekly doses of *suds*, during the first five or six weeks of the season, it would tend much to place the plant beyond the reach of those insect tribes that prey upon its foliage.

We observed a few weeks since among the appointments of the President of the United States, the name of *James Magoffin, Esq.* as Register of the land office at St. Stephens, Alabama, and felt both pain and pleasure at the information—pain that, by the new demands upon his time, we should lose one of our ablest correspondents, and consequently that the agricultural community would be deprived of the lights of his luminous mind—and pleasure, that a gentleman of so much sterling integrity of character, industry, business habits, and intelligence, had been placed in a post at once so important and responsible. For several of the agricultural journals he has been an active and constant contributor for many years, and has always commanded respect and won esteem wherever and whenever he has appeared. A practical farmer himself, and possessing an intellect no less distinguished for its strength than for its nice powers of discrimination, and in addition to these qualities, being animated by an enthusiastic devotion to the cause of husbandry, he has not only been an infatigable and successful farmer and planter, but it has been his pleasure to pursue it as a scientific calling; not one merely requiring the application of physical force—but one in which the highest attributes of the human mind could be advantageously exerted: nor was he content with his *own success*, but studiously, by precept and example, endeavored to direct others in

the same path-way that had been at once to him the source of so much mental and pecuniary profit. He was not content, like too many engaged in the tillage of the earth, to mope on in the old hackneyed course that had had made so many die their own executors; it was not sufficient for him that grand-father and father had cultivated their land in a certain way. He looked at the results of their labors; he examined the fruits of their toils, and his acute discerning mind told him at once that that system which had reduced the products from 50 to 75 per cent. must be founded upon erroneous principles, he called to his aid the lights of science, and the consequence has been that his fields have been made to teem with healthful vegetation; his stock has been well fed, and his plantation is looked upon as a model of neatness and good farming.

It may be supposed that all these good works did not proceed unobserved by his countrymen—it did not—for upon a recent occasion when the office he now holds became vacant by the death of its previous incumbent, the Legislature of Alabama addressed a joint memorial to the executive of the United States, soliciting the appointment for him—the citizens of Mobile also, unsolicited and unknown by Mr. Magoffin, but solely influenced by a desire to promote the public welfare, addressed a similar memorial to the executive of the United States. These honorable and truly flattering testimonials in his behalf, are the more gratifying to us as they are the evidences of his moral worth, not the fruits of tact and management—his is the popularity which will stand the test of time, it has been built up by him through a series of well intentioned and well directed efforts to promote the happiness of mankind, by multiplying the means of living—it is the popularity that is followed after, not that which follows—its foundation being laid with industry and cemented by intelligence, and its superstructure reared by virtue, it will only cease to exercise its moral influence when public and private worth have no admirers among men. Although his agricultural brethren may not for a time be favored with any more of the productions of his herculean pen, it will be gratifying to them to know that he is assiduously engaged in fulfilling the duties of a highly dignified situation, beloved and esteemed by all within the sphere of his acquaintance.

CULTURE OF CORN.

To the Editor of the Farmer and Gardener—

I have frequently observed in agricultural publications accounts of extraordinary products of corn; and furthermore, I have remarked that these products are greater in the northern, or ra-

ther middle states, than they are with us of the south. I have also read with interest, the directions you have given to insure a great yield of corn, which are doubtless very good; but I believe the important consideration of choosing the proper kind of *seed*, was omitted in your instructions.

Why is it that the lands in the middle states are more productive of Indian corn, than those of the same quality in Virginia, Kentucky, &c.? In the valley of the James River, one of the most fertile districts I have ever seen; and in the country round about Lexington in Kentucky, which has justly been denominated the Garden of the west; to say nothing of many other districts where the lands are extremely rich, not one field of corn in twenty will yield more than fifty bushels to the acre. The most distinguished farmer on James River, upon an island of alluvial formation, has rarely exceeded that quantity.—And yet such soils ought, as far as we can judge, to produce as much as the best field north of Mason or Dixon's line.

It may appear presumptuous in me to attempt to solve the difficulty, but I do think the attention of farmers has not been directed sufficiently to the true cause. It is well known that the varieties of corn which are cultivated in the south, have much larger stalks, and are altogether more gigantic in their proportions, than the northern varieties. It has been but a short time since I saw a statement, paraded with some exultation, of the astonishing height which the corn stalks attained in Tennessee. Now it very seldom happens that one of our large stalks mature more than a single ear of grain, and it must be evident that such an enormous vegetation must extract a corresponding degree of nourishment from the land. Hence the necessity of our being obliged to give so much distance to our corn hills, and the inevitable result of a comparatively small product of grain. The size, however, of the stalks may be diminished considerably by planting more thickly, at the same time that there will be some gain to our corn cribs; but with the large varieties we now cultivate, I deem it utterly impossible that we can ever realize any thing like the amount of grain, which on the best authority is stated to have been grown in other places.

It therefore appears plausible, if not obvious, that our farmers would materially gain by making a trial of a smaller kind of corn, even if they have to import it from some of the other states. A given quantity of land would probably support four or five times the number of stalks; on some portions of the cotton growing country, the planters have to renew their seed every two or three years. In the course of a few seasons it is very probable that under our burning suns, the small varieties of northern corn, might be transformed into the full grown likeness of our own, but it would necessarily be a work of time, and fresh seed might readily be obtained again.

That the distance which is generally given to our corn is too great, I have the best reasons for believing. A neighbor of mine who is in the habit of making excellent crops for his land, makes it a rule to plant as thick as possible, so as to ensure a tolerable good ear on each stalk. By this means his fields are more productive than some others which are more fertile.

If you have any information calculated to throw light on the subject, I shall be pleased to see it given to the public through the medium of your columns. It is my intention to make an experiment on the principles I have suggested, for my own satisfaction, and if the result should not disappoint me, you may hear from me again.

Virginia, March 1, 1836. A FARMER.

PREVENTIVE FOR THE HOLLOW HORN.

Although late in the season, some fine cows may be saved this spring, by pouring about "half a gill of spirits of turpentine in the cup or cavity on top of the head, just behind the junction of the horns—let it be repeated again in about 10 days or 2 weeks after the first application."

The above recipe was furnished us by a gentleman extensively engaged as a breeder, who has scarcely ever less than from 40 to 50 cattle, and from its highly respectable source we feel pleasure in giving it a place in our columns.

Directions for the cultivation of the Amaryllis Formosissima, or Jacobean Lily.—This is a very magnificent flower. It throws out gracefully its glittering carmine-colored petals, which have a brilliancy almost too intense for the eye to rest upon. It must be planted in a clean, new soil, naturally rich: take some from under your grass plot, and mix in a little sand. Plant in April or May, in a pot, or the open ground in a sunny situation; place the root so that the highest point is not more than one inch below the surface; it will flower in July and Aug., and will repay the little trouble of putting it into the ground. In November cut off the stalk, take up the root, and after drying it for a few days, pack it in *dry sand*, and put it in the cellar, to keep it from the winter's frost.

The following table has been prepared with great care by its author, will be found to supply a deficiency in most of the works on gardening, and prove a great convenience to every one engaged in horticultural pursuits:

From R. Sinclair's Nursery Catalogue.

I have frequently found it tedious and laborious, to make the necessary search in books written on gardening, for the most important part, the time of planting and sowing seeds, and as most people know something about the necessary preparation of the garden ground, and manner of planting and sowing, but might have forgotten the proper time to have it performed, it occurred to me that a short table might be so arranged as to show at one glance the proper time for sowing any of the various vegetable seeds in common use. I therefore have added the following one, alphabetically arranged, which I hope will render our catalogue more acceptable to our friends and customers. Where any seed is marked to be sown in the cold season, say, January, February, or March, it is intended to be sown under glass. E stands for *early* and L for *late* in the month.

I would merely remark, as to cultivation, not intending here to descend to particulars, that gar-

den ground ought to be made rich, and be deeply and finely tilled.

The following table, it must be borne in mind, is calculated for the latitude of Baltimore, and allowance for a difference of latitude must be made by those residing north and south.

TABLE
Of the Time of Sowing and Planting, marked thus *

Seeds of Esculent Vegetables.	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Asparagus												
Artichoke												
Beans												
broad Windsor												
dwarf or bunch												
pole or running												
Lima												
Beet, blood												
Balm												
Borecole												
Brussels sprouts												
Broccoli												
Colewort, or collards												
Carleton												
Cabbage, early												
late												
Cauliflower, early												
late												
Celery												
Carrots												
Chervil												
Chives or cives												
Corn salad, or vettikost												
Cress, broad leaf												
curled or pepper grass												
Cucumbers, early												
long green												
Endive												
Garden burnet												
Garlick sets												
Corn, early												
sweet or sugar												
Kale, green curled												
sea												
Leek												
Lettuce												
Melon, water												
canteleupe												
Melons, or egg plant												
Mustard												
Nasturtium												
Onion												
Okra or Gombo												
Parsnip												
Parsley												
Peas, early												
late												
Pepper												
Pumpkins												
Purslane												
Radish, early scarlet												
long white												
turnip, red												
black and white												
Spanish												
Spinach												
Squash												
Sorrel												
Salsify, or vegetable oyster												
Scorzonera												
Skirret												
Turnip, flat white												
yellow Swedish or ruta												
baga												
Tomato, or love apple												
Aromatic, pot and sweet herbs												

(From the Maine Farmer.)

GREAT CROP OF RUTA BAGA.

Mr. Holmes:—As it may be useful to report the produce of certain crops occasionally, in order to let people know what we are doing "down East," I wish to inform you that Mr. Jos. Western, 3d, of Bloomfield, raised during the past season on twenty-four rods of ground, 170 bushels, being, if I mistake not, after the rate of *eleven hundred and thirty-three and one third bushels to the acre*. What would friend Cobbet say to this if he were alive? If he who makes two spires of grass grow where but one grew before, is more of a benefactor to mankind than he who conquers nations—surely he who makes an acre of ground produce at the rate above mentioned is deserving great commendation for his skill and industry.

S.

Cotton Manufacture.—Those who are acquainted with the extent to which ingenuity and industry have carried this Manufacture, would be surprised by the facts of the case. From a document now before us we are able to speak of what Great Britain has done, and is doing, in that productive department of her national wealth. We invite attention to the facts therein stated, not so much for the gratification of curiosity, as with a hope of stimulating competition in our own country, which, above all others, possess facilities and encouragement to this profitable business.

In the beginning of the reign of George the III, but 40,000 persons were employed in the manufacture of cotton, and the annual value of the goods produced was but little over half a million sterling. There are now employed in it 1,500,000, and the value of their annual labor exceeds *thirty one million sterling!*—So great has been the improvement in appliances and machinery, even since the accession of the monarch above-named, that one man and one boy can now print as many goods as one hundred men and as many boys could have done then, and one can now produce as much cotton yarn as 300 could then do. The wonderful improvement in this manufacture establishes a fact which thousands have controverted, viz., that the increase and application of machinery deprive the labouring classes of employment. Although the steam engines in Great Britain now do the work of 33,000 horses, and water power that of 11,000, so far is manual labor from being superseded, that in this single manufacture alone, the persons employed have increased from 40,000 at the earliest period to which we have alluded, to 1,500,000. Nor is this all. The 40,000 then received annually but 1220,000 about 2 shillings per week each; now, the operatives employed in spinning and weaving, about 237,000 in number, receive upwards of 16,000,000, about 9s 6d a week each, and the most distressed class, the hand-loom weavers, 250,000 in number, receive annually 14,375,000, about 6s 7d per week each; so that the number of operatives has been increased thirty seven fold, and the rate of wages has been quadrupled.—The cotton yarn annually spun in England would, in a single thread surround the earth 303,775 times; it would extend fifty one times from the earth to the sun; (4,641,000,000 of miles,) and the wrought fabric which is exported, (484,000,000 yards) would encircle the earth eleven times.

Mr. Gideon S. White, of Tiverton, raised last season, from two common geese and a wild gander, forty three mongrel geese, viz.

5 sold before he fattened them, for	\$4 18
37 fattened, weighing 471 lbs., he sold at	
9½ cts. a pound	45 24
1 eaten in his own family,	1 46
18 lbs. of feathers, worth 50 cts. a pound	9 00

Herald. \$59 88

With system and economy, a farmer can, with very little comparative means, achieve results really astonishing; without system, the most ample means often prove of little use.

PROFESSOR DUCATEL'S REPORT.

(Continued)

Somerset county presents, in its physical geography, as might have been expected, great features of resemblance with the county that has just been described. Its upper portions are very sandy and rolling—a succession in fact of sand hills, gently inclining to the south, and terminating in a level deposit of stiff clay—as if at one time this part of the country had been a sea beach, from which the waters have receded to a considerable distance beyond the mud flats that formed at the same period of time the shallow bottom of the ocean, and extended several miles from her shores. But what is here supposed to have been formerly an extensive mud flat, is now a populous country, in many places well cultivated, every where very improvable, possessing a productive soil, well timbered and intersected by numerous creeks and rivers. These form the *necks* of the county, falling by an imperceptible slope into marshes many miles in extent, with here and there a hummock, crowned with some lofty pines, or a herd of grazing cattle looming against the horizon, to relieve the monotony of the scenery. The waters of the sound, by which these marshes are limited, are not seen, unless perhaps from the top of some hummock, and are only indicated by the occasional passage of some skiff, whose white swollen sails contrast agreeably with the luxuriant dark-green growth of these grassy plains.

Without having reason to believe that the waters of the Chesapeake bay have absolutely diminished, it is nevertheless true that the amount of dry land is increasing on the Eastern Shore of Maryland, by the filling up of creeks, rivers, and small bays, at the confluence of its muddy streams. The flats of Fishing bay and Pocomoke bay furnish us with examples of this, upon a sufficiently large scale, to produce, in no great lapse of time, very remarkable changes in the geography of this part of our territory.

That portion of the neck of land lying between the Nanticoke and the Wicomico, and contiguous to the former, is within a narrow stripe, wavy and sandy, inclining moderately to the S. E. and terminating in marshes. The intervening country is level, with a stiff clay soil; this being the character as must already have been perceived, of all those portions of the Eastern Shore, comprised within what are termed the necks. Generally speaking, the N. and N. W. parts of these necks, extending along the rivers and creeks, have a light soil; in the central portions the soil is clayey, and the S. and S. E. extremities are marshy; such is the character of Hungary neck, between the Wicomico river and Monie creek, and the description will answer for Manokin neck; though in this there does not appear to be the same uniformity in the character of the clay, which varies from a white and yellow stiff clay to a black clayey loam, equally various in its degrees of productiveness and in the kinds of crops which it can be made profitably to yield. The upper parts of this neck are covered with magnificent oaks, sweet gums, maples and beech; the lower portions support a growth of lofty pines, with an undergrowth of holly and sweet gum, and greving upon the marshes, that extend across the

neck from the Wicomico to the Manokin, the pines are small, probably a new growth. The soil of the lands that terminate the neck—big and little Dee's islands—on the north-west side, is a sandy loam, very productive in corn and sweet potatoes.

The aspect of the country between the Manokin and Annesmessex, presents us with the usual almost dead level of clayey soil, covered partly with oaks, sweet gum, maple, &c. the pine predominating towards the lower end, and on approaching the marshes, the timber having been in a great measure destroyed, there remains but a scanty growth of small pines. The extensive marshes, called the Jericho marshes, form the extreme ends of the neck, on the borders, and in the midst of which, are some few inhabited spots more remarkable for their great salubrity, than, as might perhaps have been supposed, for the dreariness of their situations. To become convinced that health and comfort are sometimes found where they are very little expected, it is only necessary to pay a visit to the hospitable residence of Capt. Davy, at the head of the salt marshes of Jericho.

Annesmessex neck, whose soil and appearance would require the same description as that already given of similar portions of the country, is thickly settled towards the lower end, by a hardy population of boat-builders and boatmen; the latter supporting themselves principally by the sale of oysters, clams, and terrapins. These men may be instanced as further evidences of the healthiness of the marshy districts of country upon salt water. Whatever may be the influence of these marshes at a distance, judging from the appearance alone of those who inhabit them, or constantly frequent them, they are not the seats of disease; for it would be difficult, in any other section of our country, to find a more hardy and robust set of men, than the residents on the little Annesmessex, the eye looks over a broad expanse of salt marshes, reaching to the southern limits of our state—Watkins' Point being lost somewhere among them. Bounding these marshes to the north, there is a well wooded country, with a good soil and highly improvable, extending to the Pocomoke bay and river, and comprising the district of Rehoboth. Marumscow neck, towards the latter district, is also well wooded, the country level, and the soil generally clay loam, in some places at the head of creeks more uneven and sandy.

Such is the account, and it will, it is believed, be found substantially correct, that may be given of the lowest portions of Somerset county. It has already been said, that the northern part of the county is sandy. It is especially so between Barren creek and Salisbury; but from Barren creek, in the direction of Quantico, to Whitehaven, the soil passes from a sandy loam to the stiff clay bottoms, described as forming the principal soil of the necks. Along the Wicomico river, on either side, the soil is mostly sandy. On the eastern side of this river, and reaching from it towards the south, the soil varies from sandy, sandy loam to clay loam; and a northerly direction from Princess Anne to Salisbury leads successively over clay, clayey loam, sandy loam, and through a swampy district, to the sand ridges of the upper portion of the county.

The only mineral product of Somerset county is *bog-ore*, of which there is an abundant deposit, of excellent quality, at the head of Barren creek. It has been raised in considerable quantity, and continues to be profitably extracted by Mr. Brattan, who delivers it at Baltimore for \$3 the ton. A large supply of this ore might be obtained from this and other neighboring localities. It is also found at the heads of Back and Dividing creeks; but samples examined from these places indicate an inferior quality of ore.

The mineral springs of Barren creek deserve more attention than they have lately received. These waters have been analyzed, and were found to contain oxide of iron, soda, and magnesia, combined with muriatic acid. They belong therefore, to the class of alkaline chalybeates, are tonic, diuretic, and have been found eminently serviceable in bilious disorders. The well known curative properties of the waters, the comfortable accommodations at the springs, with the obliging disposition of the proprietor, and of the tenant, Mr. Levin L. Porter, ought to furnish strong inducements to invalids of the Eastern Shore of Maryland, to resort to them now, as they were wont to do in former times.

No fossil deposits answering as marl, have been found in Somerset county; but a material almost as valuable occurs abundantly in various places, constituting those accumulations of oyster shells, believed to have been made on the site of ancient Indian settlements. The spots upon which these shell banks were observed, are, on the Nanticoke, at the mouth of Witupquin creek, and at the Sandflea Landing; on the Wicomico, at Long Point, where there occurs one of the most extensive banks of the kind known, the shells there, being deposited at the depth of from three to nine feet, extending nearly a quarter of a mile along the shore, and several hundred yards inland; on the Manokin, Maddox island and Fishing island are covered by similar accumulations; and on the Pocomoke, another occurs at Shelltown, about two miles above the mouth of the river. Banks of the same kind are found in other places, but of a more limited extent.

The value of this material has already been stated in a preceding report, but it cannot be too strongly impressed upon the farmers of the lower counties on the Eastern Shore of Maryland. *It is the principal agricultural resource which they possess, by a proper application of which they may double the produce of their lands.* In the upper counties of the Eastern Shore, where the worth of the material is appreciated, it is made to undergo two operations: it is passed through a coarse sieve, in order to separate the black highly fertilizing mould with which the shells are associated, and the fine fragments of these; the coarse clean shells are then burnt into lime. The sifted article readily commands from three to four cents a bushel: the lime sells at from six to nine cents, according to its quality. By referring to the section "On the comparative value of shell lime and stone lime," your excellency will perceive that the difference in value, between the two articles, for agricultural purposes, is very trifling, whilst the difference in price is considerable. Can any farmer doubt that the discovery, on the Eastern shore, of limestone quarries even of moderate extent, and to be used solely for the

conversion of the stone into lime, would be of immense benefit to the country? The equivalents of such quarries are found in the shell banks that have just been indicated. They should be no longer neglected.

Worcester county has long felt the want of some parental assistance, to enable her to bring fully into action her natural resources. She has asked for three capital improvements, of which two have been reported necessary and practicable; viz. the cleaning out of the Pocomoke river, so as to render it navigable for flat-boats, at least about fifteen miles above where it is now available, or seventeen miles beyond Snow-hill, at present the head of navigation; and a canal communication between Sinepuxent bay and the Delaware. To understand the value of these improvements, it is necessary to possess an outline of the geography of the county.

This county is bordered on the east by the Atlantic ocean and the cultivated portions of the county there is a prolonged sandy beach, varying from a few hundred yards to a quarter of a mile and upwards in breadth, and extending the whole length of the coast without a single outlet to the sea, from Indian river, in Delaware, to the southern extremity of Chincoteague island in Virginia. Between this beach and the main land lies Sinepuxent bay, from one to four or five miles wide, and nearly thirty miles in length. It is a shallow sheet of water, navigable only a short distance above South point, at the lower end of Sinepuxent neck. The entrance to the bay is reputed to be also very shallow. Sinepuxent neck, about ten miles long, lies between Assateague or Trap creek and Sinepuxent sound, at the head of the bay. The produce of this neck, and of the country on the Assateague, which, comprising the Berlin district, are among the most flourishing portions of the county, has thus to be sent down a long bay through a difficult entrance, to encounter finally the dangers of an ocean navigation in search of a market, whilst an easy, short, and safe transportation could be readily obtained. To effect this latter object, it has been proposed to connect Trap creek by the St. Martin's and Indian rivers, with the Delaware bay, inside cape Henlopen. The surveys for this substantial improvement have been made, and its easy accomplishment, at a moderate expense, demonstrated.

The other improvement, solicited by Worcester county—the clearing of the Pocomoke—has likewise been found to be practicable. Viewed in connection with the canal communication just referred to, it acquires more importance than is at first sight apparent. The Pocomoke river rises in an extensive swamp, situated partly in Maryland and partly in Delaware, called the Cypress swamp, from the profuse growth of this valuable timber, by which it is covered. The bed of the river, now obstructed by large trees, lying across it in every direction, passes through the heart of the county, dividing it into two nearly equal portions. Owing to the obstacles presented by the fallen trees into its bed, its downward navigation commences only a few miles above Snowhill, after which it is free for schooners over a distance of about twenty miles, to the mouth of the river in Pocomoke bay, on the Chesapeake side of the county. It has been proposed to remove these impediments as far up as the use of the river is found

to be impeded by this cause; and the advantages to be thence derived are shown to be considerable. It would facilitate the access to a vast body of valuable timber, and to extensive deposits of iron ore of good quality; and by confining the waters of the river within their natural channel, it would effect the drainage of a large tract of land, now an almost impenetrable swamp, covering doubtless a rich and fertile bottom. These are interesting considerations, whose importance becomes enhanced by the fact of the practicability of farther connecting, by a canal navigation, the head waters of the Pocomoke with the St. Martin river, and its projected communication with the Delaware, thus establishing a complete thoroughfare through the county, from one bay to the other.

But to render this project of internal navigation complete, another improvement seems to be required. The mud flat in Pocomoke bay, already alluded to, forms, as is well known, a serious impediment to the free egress from the mouth of the river, through the sound into the Chesapeake, and the inquiry has been made as to the possibility of removing it. Attention having been turned to the subject, the removal was concluded to be quite impracticable, as well from its nature as from its extent; being the natural effect of causes, that, as *they* cannot be removed, would be constantly giving rise to the same results. Whatever remedy might be partially applied would be therefore but temporary, very expensive, and would do but imperfectly, what, it is considered, can be accomplished in a more permanent, less costly, and more efficient manner, in another direction, namely: by connecting the Pocomoke with the Annemessex,—a project which has already met with the approbation of the Legislature, and for the performance of which an adequate sum of money has been contingently appropriated.

As this project was brought forward by an honorable delegate from Somerset, it shows that this county is equally interested in it, as she is in another direction with the proposed connection of the Nanticoke with the Choptank. Viewing these projects connectedly, it will be seen that they are intended to establish an internal communication of some extent, calculated to bring into full operation all the resources of the country through which it will pass, enabling it to send its products to a market by the shortest route, and facilitating to it the means of obtaining the materials necessary for its improvement. Some advantages would likewise be derived from it in case of war, upon which the belligerent spirit of the times compels us unfortunately to calculate as a possible event, by providing against the almost total non-intercourse between one section of the state and another. It forms a part of the duties of the undersigned to report to your excellency, that the geological constitution of the country is highly favorable to the easy accomplishment of these projects.

The agriculture of Worcester is not in so favorable a condition as it might be brought to with a little more exertion. The soil is alternately sand and clay, or a mixture of both in variable proportions, and entirely deficient in calcareous matter. On the western side of the Pocomoke, the upper portions of this district that are not swampy, exhibit a succession of sandy knolls and

ridges, with occasional basins, as it were, of level land, composed of stiff clay. The growth is principally pine and sweet gum; but on the branches, and in the swamps, there is seen a profusion of alder, maple, magnolia, kalmia, with the cypresses, of which two species were observed,—one deciduous, called the bald cypress, the other evergreen. Between the Naseongo and Dividing creeks the soil varies from almost pure sand to a sandy loam, rarely, though sometimes clayey: the pine and sweet gum form the principal growth upon it. Along the margin of the river the soil is very sandy.

East of the Pocomoke the country is more swampy, the runs that feed the river being principally on this side. It is covered by a heavy growth of oak and cypress, and when cleared and drained shows a stiff clay soil. On some portions of the newly cleared land a young growth of papaw was observed, and in some places the less auspicious persimon makes its appearance. Receding from the river the country is greatly elevated, forming a low dividing ridge between the feeders of the Pocomoke and the waters of the St. Martin river and Sinepuxent bay. This ridge-land runs north and south, in the direction of the main road through St. Martins, Berlin, and Newark. Sinepuxent neck is a level track of land, with a soil varying from sandy to clayey loam, occasionally passing to stiff clay. The middle portion of the neck is tolerably well wooded; the extreme end, towards South point, has been stripped of its timber. This, the Berlin vicinity, and the St. Martin district, are amongst the most flourishing parts of the county.

From Newark to Snowhill, on approaching the river and town, the soil becomes very sandy; and proceeding southwardly, as far as Newtown, the soil passes over a succession of sand hills, barely possessed of a soil. Towards the extreme end of the county, continuing along the Pocomoke, the country is more level, with a more substantial soil, said to yield good corn crops, and is much better wooded.

Crossing the peninsula in the direction of the dividing line between Maryland and Virginia, the country, at first level soon appears greatly undulatory, with a mixed soil. Frequently a stiff clay, to within two or three miles of the sea side, when it becomes decidedly hilly; occasionally well wooded with pine, oak, hickory, and dogwood, having a good leamy soil, that could be made very productive in corn and oats. The sea side, as it is called, is an uneven country, stretching along Sinepuxent sound, descending to it occasionally by a gentle slope, and sometimes encroaching upon it in the shape of extended marshes. The ridge-land, between the sound and river, is more level, soil more clayey and equally improvable, but no where in a good state of cultivation.

Sinepuxent bay or sound, to which reference has so frequently been made, forms a very important feature in the physical geography of Worcester county. The map A. appended to this report, and furnished for its illustration by the topographical engineer of the state, exhibits its actual appearance contrasted with that it bears in the maps and charts now extant. Its condition, as a navigable sheet of water, has been fully described in the "report of the commissioners of

the states of Delaware, Maryland, and Virginia, for the survey of the sounds between Cape Charles and Cape Henlopen," submitted last year to the General Assembly of Maryland. For present purposes it is only necessary to consider it as a narrow and shallow sea, interspersed with broken marshes and shoals, composed of oyster shells, mixed with clam, scallop and other marine exuviae. It is interesting in a geological respect, and not a little so, as will immediately be shown, for the agricultural resource which it actually does and can more extensively be made to yield.

It is an interesting fact connected with the past and present condition of Sinepuxent sound, that since the closing up of some inlets admitting the ocean into it, its waters having thus become comparatively fresh, the oysters and clams, by which they were formerly thickly inhabited, have died, leaving extensive beds of their exuviae. These accumulations of shells, or *oyster rocks*, as they are here termed, seemed to point at the manner in which similar deposits, now far inland and constituting the shell-marl deposits of other districts, have been made. They are evidently the quiet and gradual accumulation of years, covered by a deposition of sand or mud, varying, according to circumstances, with the altering condition of the country where they are now found, and in some measure serve to explain the mode of formation of our fossiliferous beds. At no very remote period of time, they will probably furnish the prototypes of a geological formation, hitherto undescribed and characterised by the presence of a new species of zoophytes. In their present state, these oyster rocks afford an abundant supply of very valuable material, already put to good account, but that ought to be much more extensively employed. They are now dredged, and their contents, consisting of oyster shells, clams and other marine shells, incrustated by a zoophytic production which has received the name of *Bunyan*, are burnt into lime. From this source not only an important and profitable branch of industry is created, but an invaluable product obtained for the improvement of the whole of Worcester county. The question has been asked, whether the lime obtained from this source is good? It may at once be answered, that it is as good as from any other quarter; but a more satisfactory reply will perhaps be found in the third section of this report. Indian shell banks also are found on Sinepuxent neck where they have been partially applied, and always with the best results, which ought to be an encouragement to their more liberal employment.

The mineral product of Worcester county is confined to the bog-ore, occurring abundantly on the Naseongo, where it has been worked with variable success, being unfortunately too much mixed with phosphate of iron. A deposit of ore of better quality has been discovered on the Pocomoke, in the fork between this river and Duncan's mill-branch, and it is again met with in the swamps around Newtown.

A more general view of the application that can be made of the knowledge so far acquired, respecting the physical geography of the three counties just described, remains now to be taken.

(To be continued.)

[From the American.]

MARYLAND INTERNAL IMPROVEMENTS.—HIGHLY IMPORTANT LEGISLATIVE REPORT.

It is with most unfeigned satisfaction—with a feeling of gratification, indeed, that we want words adequately to express—that we lay before the readers of the *American* this morning the following able and luminous Report, which was presented to the House of Delegates of Maryland, on Wednesday last, by Col. Merrick, Chairman of the Committee of Ways and Means. It is truly a cheering document, and comes to us with double acceptableness after the gloom which had been cast upon the friends of Internal Improvement by the recent untoward developments, touching the prospects of the Chesapeake and Ohio Canal Company. It will be seen that the Committee, taking an enlarged and liberal view of the State's interest, directly and indirectly, in works of Internal Improvement, have turned their serious attention to the consideration of the mode in which her investments in those works may be rendered safe and profitable, *while the system is farther and harmoniously extended, so as to produce the greatest good to the greatest number, develop the resources and augment the commerce, population and wealth of the State.* The result of these deliberations is a recommendation, backed by the conclusive arguments upon which it is based, to appropriate the sum of TEN MILLIONS OF DOLLARS to the objects in question.

The condition of the Currency forms, also, a leading and scarcely less interesting topic of the Report. It likewise discusses the causes of the depressed value of large portions of the landed estates, and of the emigration of the people—with a view to appropriate remedies for those evils.

In reference to the prominent subject of internal improvement, the Report takes the broad and true ground that the time for the adoption and prosecution of a great system of public works *has now fully arrived.* In accordance with this opinion, the Committee bring in view the various Canals and Rail roads commenced or contemplated within the limits of the State, and after a lucid and interesting exposition of their relative importance and circumstances, they arrive at the conclusion that there are five distinct works which deserve, and should at once, receive the aid of the State. These works, and the amount of stock recommended to be subscribed for in each, under the conditions severally attached to them, are as follows:

To the Chesapeake and Ohio Canal,	\$3,000,000
To the Baltimore and Ohio Rail road,	3,000,000
To the Eastern Shore Rail road,	1,000,000
To the Maryland Canal (extending the Chesapeake and Ohio Canal to Baltimore,)	500,000
To the Annapolis Canal,	500,000
	\$8,000,000

The subject of the Currency and increased Banking Capital is next discussed, with all the ability and conclusiveness of argument which characterize the preceding part of the Report.—The peculiar position of Maryland, as the frontier of the slave-holding States, and the advantages she may derive therefrom in her commercial in-

tercourse with the South, are also dwelt upon. *Capital*, the Committee justly contend, is alone wanting to place Baltimore in advance of her competitors for the commerce of that region—to enable her merchants to purchase the agricultural products which the works of internal improvement will pour into her lap as a common reservoir—and to furnish in return, the direct importation, the fabrics and productions of foreign countries. For these considerations, the Committee recommend the passage of the following bills:

- A bill to incorporate the Western Bank of Balt.
- “ “ Commercial Bank “
- “ “ Eastern Bank “
- “ “ Chesapeake Bank “
- “ “ Farmers' and Planters' Bank “
- “ to enlarge the capital of the Franklin Bank of Baltimore.
- “ to incorporate the Real Estate Bank of Baltimore.
- “ “ Farmers' and Millers' Bank of Hagerstown.
- “ “ Mineral Bank of Alleghany at Cumberland.

The depression of the Agricultural Interests, and the causes of emigration from the State, are the next subjects examined by the Committee. For their relief, they recommend the appropriation of loans to the amount of a million of dollars to be further augmented in the manner explained in the bill accompanying the Report. The bill thus reported is entitled “A Bill to provide ways and means to complete works of Internal Improvement, and to promote the Agriculture, Commerce, and Manufactures of the State.” It provides for the negotiation in Europe of a loan of ten millions of dollars, on the credit of the State, bearing six per cent interest, and irredeemable for fifty years.

This is a brief and necessarily imperfect notice of the several deeply interesting matters referred to in this statesman-like and most acceptable document.—Its recommendations, if carried out by the legislature—and of their adoption by that body we are rejoiced to be assured there is no doubt whatever—will elevate Maryland, and this her commercial metropolis, to the enviable stations they are entitled, as well from their central position as their unsurpassed natural advantages, to occupy among their sisters. To the committee who have presented the report, and to the legislature which will sanction and give practical effect to the vital measures recommended therein, a debt of deep, abiding gratitude is due from every citizen of Maryland.

Extract from the report of Col. Wm. D. Merrick, made to the legislature of Maryland, Wednesday, March 9th, 1836.

Your committee also fully sympathise with the numbers of their agricultural brethren who yearly come up to their representatives, complaining that their exertions are crippled by the want of pecuniary aid; they are of opinion that these are entitled to receive aid, and that it may be adequately afforded, not only without injury, but even with the greatest certainty of much and various advantages to the State. In the mode of relief alone, and in a preference for more simple machinery,

your committee, actuated by a single aim at the general good, presumes to differ from those who have urged at one time, the establishment of a State Bank, and more recently of a Real Estate Bank, founded on the credit of the State. This report has already swollen to a length which forbids the detail of reasons by which your committee has been convinced, that the mode of relief which they are about to recommend will operate more equally, and produce more extensive benefit, without incurring many dangers, which may be feared from the grant of the State's guaranty to the stockholders in the Real Estate Bank; but they indulge the hope, that a plan for lending money, in which any holder of real estate may participate on easy terms, the interest enuring to the benefit of the whole people, may prove acceptable, and suffice until a sufficient experiment can be made, as is proposed in part for this purpose, by means of the Real Estate Bank of Baltimore, of the capacity of such an institution, without the credit of the State, to operate advantageously.

Trusting that the bank charters above recommended, may receive the sanctions of the Legislature, your committee conceive that by these adequate encouragement and relief will be afforded to the holders of real estate in the city of Baltimore, as well as to those who are engaged in commerce, manufactures and the mechanical arts; and to carry out the views above expressed, they recommend there be placed in the treasury of each shore, or elsewhere, under the direction of a board of commissioners, consisting of one member for each county, the sum of one million of dollars, further augmented as the bill reported herewith will explain, to be equitably distributed throughout (excluding from participation the city of Baltimore, for the reason above given) in loans on landed security at long terms. It is further recommended that the loans shall bear interest after the rate of six per cent. payable semi-annually; but that for such sums as shall be expended in the melioration of lands by drainage, by the application of mineral manures, or in planting the mulberry and the production of silk, the annual charge for interest shall be reduced to four per cent. This reduction of interest is recommended by way of premium to agricultural industry, and cannot, in the judgment of your committee, fail greatly to redound to the advantage of the public, as well as to individual good; but especially in directing the attention of proprietors to the reclamation of drowned lands, your committee anticipate that while individuals will accomplish much, a large stock of experience will be acquired, and the way for those operations of that character, which, by reason of their extent, will require the interposition of the State.

There is one work of this character to the accomplishment of which your committee would advise an immediate appropriation. It will be remembered that in the preceding description of the several works of internal improvement projected, every part of the State may directly participate, except the three southern counties of the peninsula of the western shore. It is an honour due to those counties, of which none can deprive them, that thus situated, from the first embarkation of the State in these great enterprises, however those portions of the State more deeply interested have been divided by jealous conten-

tions, they have, by their representations in general, given to every public work, a support as steady as it has been generous and disinterested. The work now indicated lies in their midst. It is a body of the richest alluvial land, containing perhaps fifteen thousand acres, called "Zachia Swamp." It is described, delineated, and the improvements declared practicable, in the late report of the State Engineer.

Your committee has the honor herewith to submit a bill entitled "An act to provide ways and means to complete the works of Internal Improvement, and to promote the agriculture, commerce and manufactures of this State," which will be found so fully explanatory of itself, that it will perhaps be sufficient to add, that it provides for the negotiation in Europe of a loan of ten millions of dollars, bearing an interest of six per cent. and redeemable at the pleasure of the state, at any time after the expiration of fifty years. Upon such a stock, in the present easy condition of the foreign money markets, your committee entertain no doubt but a premium of at least twenty-five per cent. may without difficulty be obtained. Upon that hypothesis a brief calculation is subjoined, by which, assuming that these public works shall when completed be competent to pay on their stocks conjointly, not more than simple interest, we hold it demonstrated that the whole debt, principal and interest, will be paid off at maturity. In the mean while the productiveness of all the former investments of the State may be placed and maintained in full activity, her ordinary revenues increased, her population multiplied, her property and resources developed and augmented; the wilderness subdued, her people happy in the fruition of an ample provision for universal education, and every other blessing which it is the object and end of government to secure.

When the sure realization of such results shall have come, what son of our soil, wandering from his home, will not feel the burthen of each remove more and more insupportable? With what affection will he not ponder on the domestic altar, sighing to behold again the green fields, bright sunshine and laughing waters of his natal spot—and how will his soul swell, to find dwelling in the applause of Nations—Maryland—Heart of the Union!—the enterprising—steadfast—unterrified—unseduced!

WILLIAM D. MERRICK, *Chairman.*

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POTATO OATS.

100 Bushels seed potato oats—a choice article—for sale by JAMES MOORE, Light, near Pratt st. Ma 15. at the Maryland Agricultural Repository.

EASTERN WORK OXEN.

MR. BARNEY, of Philadelphia, late of Port Penn, Delaware, writes us that he has several pair of EASTERN WORK OXEN for sale. Their prices will vary from \$120 to \$150 per pair. He represents them as fine animals. Persons who may want them, should make early application, as Mr. B. intends disposing of all his unsold stock about the 1st proximo.

Letters addressed to the Editor on the subject, must be post paid. mh 15

AGRICULTURAL IMPLEMENTS, GRASS SEEDS, &c.

JAMES MOORE, successor of Sinclair & Moore, Light street near Pratt, tenders his thanks to the agricultural community, for the liberal patronage heretofore afforded to the Maryland Agricultural Repository, and respectfully invites the attention of farmers and others, to his stock of articles now on hand, comprising a large assortment of PLOUGHS of the most approved patterns, both wrought and cast shears, and of sizes adapted to all the purposes of agriculture—also Hill side and double mould board ploughs.

Corn cultivators of different kinds, those with five wrought tines generally preferred: Harrows of different shapes and sizes.

Corn shellers, the usefulness of which has been fully attested, and the increased sales of the last year, together with the many impressions of their utility, by those who use them, give evidence of their excellence—price \$20. Subject to a discount of 5 per cent for cash payment.—Price from \$15 to \$30. Improved Wheat Fans, of different sizes.

Cylindrical Straw cutters, a superior article for cutting any kind of long forage, 20 inch boxes adapted to horse power, \$75—extra knives per set \$6. 14 inch box adapted to manual power \$45—extra knives \$5 per set. 11 inch box which has some recent improvements \$30—extra knives, \$3 per set. Common dutch straw cutters from \$5 to \$7 50.

Garden and Field Tools, such as spades, shovels, hedge shears, mattocks, grubbing hoes, pruning tools, and hoes in a variety of forms, &c. Cast steel axes, warranted, Wove wire for screens, fans, cellar windows, safes, &c. Cotton Gins made to order—Grain Cradles—Harvest tools in their season.

Machines for sowing clover seed, which distribute the seed with regularity over a space of 12 feet at a time.

Having an Iron Foundry attached to this establishment, extra castings for ploughs of all kinds, Threshing machines, Horse powers, Mill work, window weights, &c. can be furnished or made to order of the best quality and at moderate prices.

FIELD SEEDS.

Orchard grass, Herds grass, Tall meadow oat grass.—Timothy and Clover; also on hand a lot of Ruffe oats.—Buckwheat, Millet, Potato Oats, &c.

Retail sales mostly confined to town acceptances, or to cash for which a discount will be made on implements. March 8th.

A BROOD MARE FOR SALE.

A SUBSCRIBER in Virginia writes to us as follows:

"I have a considerable stock of Blood Horses on hand, which would allow me to spare a Brood Mare, by the celebrated *Contention*. Should any gentleman wish to breed from any of the imported or other horses in the south, it would afford a fine opportunity to purchase her and have her served before taking her to the north. She is young, has brought two colts, and can be accompanied by well authenticated testimonials of pedigree, as her sire is well known, and her dam was once owned by Col. Wm. R. Johnson."

Any person desirous of purchasing a Brood Mare of the above description, can be supplied by addressing a letter to the Editor of the Farmer and Gardener—post paid.

Feb. 16.

4t.

GAMA GRASS SEED.

JUST received, a fresh supply of Gama Grass Seed. This is the grass that bears cutting every 15 days for soiling, and every thirty days for hay, from the middle of May till frost, say till the middle of November, and has yielded at the rate of 64 tons to the acre under peculiarly favorable circumstances, and from an acre of which 30 tons may be calculated upon. The earlier it is sown in the spring the better.

ROBERT SINCLAIR, Jr.
Maryland Agricultural Repository, Light near Pratt street.

Feb 9



DUTCH BULBOUS FLOWER ROOTS.

THE following list of Bulbous roots, are just received in good order after a tedious voyage of six months. They were selected by an eminent Dutch Florist, for my special retail sales, and comprise the finest kinds. Gentlemen wishing to stock their gardens with superior flower roots, will do well to call and examine them.

The proper time for planting most bulbs, is during the fall months—but if carefully planted, particularly the Hyacinth, they will flower well if planted as late as the last of March. The different species of *Amaryllis*, *Terraria Tigrida* or Tiger flower, and other delicate bulbs should be planted during the months of April and May. They are as follows:

80 varieties of *Single and Double Hyacinths*.
78 do *Early Bybloem*, *Bizarres*, *Double Parrot*, and *Duc Van Thol Tulips*.

Crocus, 8 colours; *Anemone*, 12 sorts; *Narcissus*, single and double; *Aran Dracunculus* or *Dragon plant*; *Jonquills*, *Crown Imperials*, *Fritillaries*, *Iris* or *Flower de Luce*, *Terraria Tigrida* or *Mexican Tiger Flower*, 25 sorts *Amaryllis*, *Galanthus*, *Pon Cratum Lily*, *Commus*, and 300 roots *Jacobian Lily*, *Amaryllis Formosissima*.

ALSO

300 sorts *Double Dahlia roots*, will be in store early this spring, comprising all the finest and most admired kinds.

ROBT. SINCLAIR, Jr.
Light, near Pratt st. wharf.

March 8

NEW AND SUPERIOR VARIETIES OF VEGETABLES.

EARLY white flageolet Bush Beans, *earliest of all*, and excellent.

Dwarf white Soissons do *very productive and nearly stringless*.

French straw colored Dwarf do *extra early*, and *very productive*.

Large white Soissons pole Beans, *excellent green*, and when dry equal to the Lima, much earlier and far more productive.

Early Primitive Pea, *earliest of all*.

Keen's Seedling Pea, *extra early*.

Early Warwick do *extra early*.

Dwarf Green Marrow or Waterloo Blue do. *very fine*.

Groom's superb dwarf Blue Pea,

New Grotto marrow do *superior*.

Knight's tall and dwarf green marrow Pea

Early white Sugar Beet, *sweetest of all*.

Earliest French Cabbage.

Arkhes early dwarf cabbage, *extra early*.

Early Emperor do *very fine and early*.

Bonneuil cabbage, *monstrous heads on*, *finest for autumn*.

Green Pancher Savoy, *finest of the Savoy*.

Quintal, *best for winter*, *for table or cattle*.

Long white Carrot, *sweetest of all*.

Large solid violet Celery, *forms strongest stalks*.

French green table Cucumbers, *medium size but very productive*.

Spanish long green do *some measured 22 to 24 inches the past season*.

Long ridge or hand glass Cucumber.

Piedmont yellow six weeks corn, *earliest of all*.

Moore's early Yellow, do *very early*.

Early curled Silesia Lettuce or curled Ice.

Napes curled Cabbage do *very large, superior, and of beautiful appearance*.

Large Calais Cabbage do *large heads & very fine*.

Large French Blonde Coss Lettuce, *superior*.

Green fleshed netted Romana Melon, *large and superior*.

French Muscade Melon, *green fleshed and fine*.

Imperial Melon, *rose colored flesh*.

Malta Winter do. *very solid, green fleshed, and keeps till February*, and above 20 other fine new varieties.

Early Silver skinned Onion, *new and earliest of all the white varieties*.

Early Red Madeira do *earliest of all the red varieties*.

Two bladed Onion.

Early turnip rooted Parsnip.

Yellow Tomato shaped Pepper.

Spanish cheese Pumpkin, *very solid and superior*.

Seven Years or long keeping.

Earliest French Scarlet Radish, *extra early*.

Flanders large leaved Spinach.

Monstrous bush Squash for summer.

White Cushaw do for autumn.

Large Tenerife, do keeps till March and makes very superior pies.

Yellow Altringham Turnip, *superior*.

White Swedish Turnip, *devoid of the pumpkin flavor and more delicate than the yellow variety*.

Berlin or Teltau Turnip, *par excellence*.

This list embraces but a few of the newest varieties.

All applications to be made direct per mail, and priced catalogues will be sent gratis to all who desire them. The stock of seeds is the most extensive in America, and the prices in quantity to vendors are very moderate, and a convenient credit will be allowed—of Flower seeds above 600 varieties.

WM. PRINCE & SONS.

Linnæan Garden & Nurseries—Flushing, near N. Y.
March 8

500,000 SILKWORM EGGS.

THE subscriber offers for sale 500,000 Silkworm Eggs low to close sales.

JAMES MOORE,

Agricultural Repository, Light, near Pratt st.
March 8.

BARNITZ'S BREED OF HOGS.

WITHIN a few days, four of my sows of the above breed have got fine healthy litters of pigs, and appear as if they would do credit to that celebrated breed, and will be ready to deliver to order the latter part of April. Price \$10 a pair.
ROBT. SINCLAIR, Jr.
Clairmont Nursery, near Baltimore.

TREES—SEEDS, &c.

100 LBS. White Italian Mulberry Seed, direct from the most celebrated Silk Districts in Italy.

75 lbs. White Mulberry Seed of American growth.

60,000 Chinese Mulberry cuttings perfectly prepared for planting.

2,500 Chinese Mulberries, of large size, 900 of which are inoculated on the white mulberry, which gives them additional hardihood—price \$50 per 100.

These trees were planted in an orchard which it is necessary now to remove.

35,000 Chinese Mulberries of the usual sizes at \$25 to \$30 per 100, and some of larger sizes, at \$37 per 100.

Fruit and Ornamental trees, Green-house Plants, Roses, Bulbous roots, &c. The collection of which is unrivalled, and priced Catalogues of which will be sent to every applicant. Double Dahlias above 500 most splendid varieties, and comprising 200 very rare and superb kinds not to be found elsewhere in the Union.

Garden, agricultural, and flower seeds—an immense collection comprising all the new and rare varieties of vegetables, &c., as will be seen by the catalogue.

20 bushels of the celebrated chevalier Barley.

1,000 lbs. Early Crimson Clover, or *Trifolium incarnatum*.

2,000 lbs. White Dutch Clover,

20 bushels Talavera wheat.

10 do Venetian do

100 do Early Angus and Hopetown oats, the latter weighing 44 lbs. per bushel.

Or hard Grass seed.

167 do Tall meadow oats grass.

75 do Italian Rye grass, (very valuable).

30 do Pacey's perennial rye grass.

100 do Pacey's perennial rye grass.

2,000 lbs. Finest Provence Lucerne.

20 bushels new white Field Beans (very productive)

300 bushels early Nonpareil, Lancashire Pink Eye,

Taylor's Forty-fold and other celebrated Potatoes.

25 bushels Potato Onions.

Also, Field Burnet, St. Foin or Esparcette, Large Riga

Fax, Lentils, Vetches, Millet, Yellow Clover—a superior large variety of Teazel—2 varieties of Castor Oil—

Bean, Weld, Wood, Madder, &c.

Orders sent direct per mail will receive immediate attention, and seeds in quantity will be supplied at very moderate rates.

WM. PRINCE & SONS,

Linnæan Botanic Garden & Nurseries, Flushing near N. Y.
Feb. 23



FIELD & GARDEN SEEDS, &c.

WARRANTED GROWTH, 1835.

THE subscriber has just received and is now opening a large and superior assortment of GARDEN and RARE FIELD seeds, growth 1835.

All those seeds which can be raised to advantage in this country, are saved by careful seed raisers at the *Clairmont Seed Gardens*, near this city. Seeds which are found necessary to import are principally from the south of Europe, where they become so well matured, that their vitality is preserved much longer than those obtained from the humid climate of England.

Of the endless variety of Cabbages, Lettuce, Peas, Beans, Cucumbers, &c., none are retained but such as are known to be truly excellent.

The most prominent seeds received, and in store, are 250 bushels Garden Peas of various sorts.

95 bushels Dwarf and Pole Beans

2000 lbs. Cabbage Seeds. About 35 fine sorts, among which are the Scotch Early York, London Buttersea, Flat

Dutch, Globe Savoy, Early Harvest, &c.

150 lbs. Cucumber seed, about 12 sorts, among which are Keene's Long Green, Long Green Turkey, &c.

1800 lbs. Radish seeds—principally of Short top Scarlet,

Yellow and Red Turnip.

300 lbs. Beet and Mangel wurzel seed.

50 lbs. Green Curled Borecole, or Scotch Kale, purple

curled—blue curled, &c.

35 lbs. Cauliflower and Broccoli—best European sorts.

200 lbs. Carrot seed—for garden and field

75 lbs. Lettuce seed—the curled Silesia, large white or

Lazy, brown Dutch and Malta, are best sorts, the latter particularly fine for forcing.

270 lbs. Onion seed—several French and American sorts.

Also—Tart Rhubarb seed, Tomato, Egg plant, Squash,

Black and Orange Salsify, Spinach, Peppers, Ockra, Flag

Leek, Cress, Celery, Endive, &c.

FIELD SEED.

60 bush. English and Italian Rye grass seed.

50 do Green Sicard grass, for yards, &c.

1,200 lbs. Scarlet Trifol or clover, *Trifolium incarnatum*.

800 lbs. Lucerne or French clover.

50 bush. English and Poland oats.

250 lbs. Skinkss or Huskless oats—new—great product.

150 bush. best English and American Early Potatoes.

100 lbs. Gamma Grass seed—this grass bears cutting every

15 days, and of course the product is immense.

50 bush. White and Yellow Field corn.

ROBT. SINCLAIR, Jr. Seedsman,

Light st. near Pratt.

THE SILK MANUAL.

JUST published and for sale by Sinclair & Moore and Robt. Sinclair, Jr., at the Maryland Agricultural Repository, Light near Pratt street, Baltimore, a complete Manual of the Silk Culture, in which plain instructions are laid down for the culture of the Mulberry, the feeding of the Silk worms, management of the cocoons, reeling, spinning and dyeing of the Silk. In fine, it is a perfect Manual, and comprises every department of the business. The rules are arranged in so plain and methodical a manner that every one can understand them, and by a very few hours attention become master of the business. It is clearly demonstrated in this Manual, that largely upwards of \$500 may be netted from an acre in the Culture; and it is a singular fact connected with the Mulberry as adapted to the making of Silk, that poor dry, sandy, or gravelly land suits it best, the fabric made from worms fed on leaves raised on such soil, being greatly superior in elasticity and richness of gloss to those grown on rich grounds.

Price—per copy, 50 cents.

Liberal discounts made to the trade.

RUFFLE OATS,

For seed, may be had at the Maryland Agricultural Repository, Light street, Baltimore, by application to
Dec. 8 JAMES MOORE.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

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Vol. II

THIS publication is the *successor* of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 centsworth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, MARCH 22, 1836.

The letter of our esteemed correspondent, John Smith, Esq., of Dardenne, Missouri, is full of interest, and written with his usual good sense, close observation, and strong discriminating powers of mind.

The advice of our correspondent, "*A Subscriber*," will be found excellent, and may be practiced upon with decided advantage by most men in all the avocations of life.

Those of our subscribers who have written to us concerning the *Virginia Corn Crusher and Grinder*, as well as our readers generally, are referred to the advertisement of Mr. James Moore, which will be found under the proper head.

RAIL ROAD FROM BOSTON TO NEW ORLEANS.

We were hard at work some days since, when an old and esteemed friend came into our office and from certain outward signs and the inventive turn of his mind, we were certain that he had some new and useful plan, to husband time and overcome space, to shew us; and we were not disappointed; for it was no less than a draught of a rail road to be located between the points designated at the head of this article, on which he proposes to carry the United States mail, and to transport it from the one place to the other in *two days*. Only think of it, 1700 miles in two days! Why, we ejaculated, "a man might as well be shot out of a Columbiad, as to be propelled along at this rate." The very thought of such velocity, at its first conception made the blood curdle and move along our veins with a chilly sensation; but when we came to set down coolly and make a calculation with our friend, it did not appear to be any great scare-crow after all. From Boston to New Orleans is about 1700 miles, so that it would be but 35 miles an hour, which is not half the speed according to Mr.

Gurney's estimate of the velocity to which travel on rail roads is susceptible of being safely carried, when the cars are propelled by a steam-engine of proper power.

The *tracks* themselves, as represented in the drawing, appeared to us to be so carefully guarded, as to render it impossible for the cars to run off under any contingency that might occur, which circumstance, besides making passengers feel comfortable, will, we should think, win golden opinions for our friend's trackway, and we should not be surprised, although we have passed the prime of manhood, at seeing the mail carried from Boston to New Orleans in the time herein named, or even in a less number of hours.

AMERICAN SEWING SILK.

We were shewn some days since *four* parcels of sewing silk made by a lady residing near Gettysburg, Pennsylvania. The worms were fed on four varieties of the mulberry as will be hereafter explained, and the cocoons reeled on a common reel. The several samples are bound round by different colored thread so as to point out the particular kinds of mulberry on the leaves of which the worms were respectively fed. The letter says:

"That bunch with the *white thread* was raised from the *white mulberry*; the bunch with the *black thread* was raised or fed on, our common black mulberry; the bunch with *red thread* around it from the wild red mulberry, and that tied with the *green*, is of a kind found in our woods, with a much larger and thicker leaf, and the lady who fed the worms and made the silk, says the worms will consume the whole leaf, stems and all."

All of those samples of silk are beautiful and highly creditable to the patriotism, industry and skill of the lady by whom they were manufactured. Each is as lustrous as the imported silk, and although the twisting is not as well done, yet the elaboration of the thread is unusually perfect and evenly drawn out. All of them would compare with the foreign article in glossiness, and in that delicately rich hue which silk made from healthy worms invariably has. The last parcel made, however, was boiled beyond the proper point, and notwithstanding it still retains all the brilliancy peculiar to silk, it has lost that proper-

ty of communicating to the nerves of the fingers the sensation which is imparted to them on the taking up of a pinch of the flower of sulphur, a thing which, if observed, will serve as an excellent criterion to test when the commodity has been long enough boiled.

From the tenor of the letter we have quoted, it would seem that the writer is of opinion that the whole of the respective varieties of the mulberry with which these worms were fed, are native, a mistake which he might very readily fall into from the circumstance of their all being found growing wild, but there are but one kind which has as yet been ascertained to be *native* with us, and that is the *Morus Rubra*, a tree of very considerable altitude, reaching sometimes the height of forty feet. Its fruit is of excellent flavor and of a deep red colour, hardy and competent to resist our frosts. As a fruit it is decidedly preferable to the *black*, being infinitely more imbued with that rich mellow, sub-acid taste which is at once so pleasant and grateful to the palate.

We have acclimated among us, and it is often found growing in our forests far from the homesteads of civilized man, the *Morus Nigra*, a native of Asia Minor, also a robust and hardy tree, bearing a fruit delightfully aromatic, and well charged with a sub-acid liquid, which when submitted to vinous fermentation, makes a very palatable wine.

The *Morus Alba*, or White Italian Mulberry, is often found in our densest forests, struggling against the legitimate lords of the land, but they are the offspring of accident, or perhaps the nurslings of some member of the feathered tribe, which, in gorging its appetite had taxed the stomach beyond its healthful action, so that, to the imperfect state of its digestive organs we are indebted often for the propagation, in places unexpected and unlooked for, of vegetable productions not "*native here*." To this cause we are, no doubt, also to ascribe the several varieties of mulberries spoken of in the present instance.—And, indeed, there are varieties of the *Morus Alba*, or White Mulberry, which, if we were to judge of the tree by its fruit, would confound our understanding, and lead the mind to an erroneous result, for the berries, which are a very meagre apology for fruit, may indiscriminately be found white, red, and, indeed, sometimes present the anomaly of a party coloured fruit.

There is also the China or paper mulberry, known to Botanists as the *Morus Papyrus* or *Broussonetia Papyrifera*. This tree takes its cognomen from the fact of paper being made from it in China. It too, bears a berry, round and singular in its appearance, and not very inviting to the human taste. Its foliage is as many shaped as *Proteus* himself. But for all the purposes of food, the leaf is utterly worthless. As a shade tree it is valued by many in consequence of its leaves being wholly exempt from all insect-visitations.—Those voracious little creatures that annually destroy the foliage of the lofty elm, would as soon undertake to demolish an Elephant as to trust themselves within the rough and shaggy coating of the leaf of this tree.

Again, we have the *Dandolo* or *Moretti Mulberry*, a new variety which has the reputation of affording excellent nourishment for silk worms. It bears a fruit, which, when perfectly ripe is black. The leaf is eight or ten inches long and nearly as wide.

And “last, though not least,” comes the “ noblest of them all,” the *Morus Multicaulis*, or many stalked Mulberry. This is a shrub of some 8 feet high, with a leaf as large as a dinner plate, perfectly free from all coarse fibres, a circumstance which gives it an advantage over every other kind as food for the silk worm, as they consume the whole leaf.

Those who are desirous of engaging in the culture of the Mulberry, should not fail to sow the seed of the *Morus Alba*, (the Italian White Mulberry,) this spring, and they should recollect that the sooner they do so after the frost is out of the earth the better. We do not hesitate to recommend the culture of this variety of the Mulberry to all persons; for if there were no other reason, the single fact of its foliage vegetating fully two weeks before that of the *Morus Multicaulis* should be conclusive. The superior economy in the gathering and feeding of the leaf of the latter kind, must always place it far in advance of all the other sorts; but still the advantage of having its foliage available so much earlier, must render it very desirable to farmers to cultivate a portion of their lands in the white Italian Mulberry; for while it will thus be in readiness to meet such demand, it will serve also for any other contingency that may occur.

Wherever ground may be an object, the white Italian Mulberry may be planted in hedges, to serve as *division fences*; and it here may be proper to remark, that after a few years protection from cattle, their subsequent browsing upon its foliage

will be rather a benefit than an injury. Of its making a good and impenetrable hedge, one that will turn horses, cattle and hogs, there is not the least question, nor is it more questionable, that it will make one far more durable than either of the thorns now used. If then the division fences on one's farm, can be turned to so profitable an account, as the feeding of silk worms, in addition to its office of protecting the crops growing in the field, should any one owning a farm hesitate a moment in placing himself in a situation at once so eligible and lucrative?

In order to facilitate the operations of those who may have mislaid or forgotten the directions given last summer, we will repeat them now, and take this occasion to call attention to them:

DIRECTIONS

For sowing the seed and raising the plants of the White Italian Mulberry Tree.

1. To sow an ounce of seed, prepare a bed 50 feet long and 4 feet broad. Manure it well with a compost composed of 1-3d stable manure, 1-3d ashes, and 1-3d decomposed leaves from the woods, or garden mould; dig deep, pulverise finely, and then lay the beds off in drills 12 inches apart, $\frac{1}{4}$ or $\frac{1}{2}$ of an inch deep; sow the seed as thick as your onion or parsnips; cover with rich mould, press the mould down gently, but sufficiently to cause the seed to come into contact with the earth; and should the weather be dry, water the seed bed every other evening, it will assist in promoting the germination of the seed and vigorous growth of the plant.

2. Keep the beds clean of weeds; and give an occasional watering with suds or soot and water, say once a week after they are up.

3. The second year, if not removed before, the plants must be removed into the nursery rows, which must be prepared as for any other crop. The ragged roots being taken off and the tap root shortened, the plants must be planted out 12 inches apart in rows three feet apart, the earth to be well trodden around the plant. As before, the earth must be kept open and free from weeds.

4. At two years old, the plants may be planted out into hedges, at 18 inches apart in rows six feet wide. The ground should be prepared as before directed, and some good rich mould put into the holes, to be pressed around the plant. If intended to be planted out as standard trees, 20 feet square apart would be a good distance; but in that case the plants should not be transplanted until they are about an inch in diameter. In either case they will require trimming and topping, and if kept as hedges should be treated as other hedges are.

[For the Farmer and Gardener.]

“Little things are great to little men”—little attentions necessary to secure important results.

Mr. Roberts—The aphorism of our caption will appear evidently applicable to most affairs of human life. But the particular application designed, at present, is to the concerns of the vege-

table kingdom, and to that part of its economy pertaining to transplanting trees and vines.

The ordinary process of doing this is presumed to be known. But they often die or are lost after the trouble of transplanting, for the want of some preparatory process. Those taken immediately from the nursery, and transplanted at once into holes previously prepared, generally grow without fail. But as it regards those carried a distance, or out of ground some time, the proverb of the fatal effects of a fish too long out of water, frequently applies,—and often applies too after due care of boxing and the like has been taken. One little attention I would suggest in this case, is to soak the roots of trees and vines, a due time, before transplanting. The manner of doing this, the writer will illustrate by an example in his own practice. Owing to an unlooked for delay, a box of grape vines and trees coming three hundred miles, did not reach him till late in the season, when most vegetation had put forth. Moreover their roots appeared dry and sapless. Recollecting that in a like case once before, he had lost all, it appeared almost hopeless to plant them. But he resolved, at length, to try the efficacy of a method found detailed in a letter from a friend. He, therefore, took these down to a branch or run, covered their roots in the mud—dammed up the water so as nearly to cover the whole plant, and let them so remain some days, or till the buds had swelled considerably, and then planted without losing any.

To conclude, I would remark, that, some farmers, otherwise careful, are in the habit of neglecting matters they deem little, for the alleged reason of attending well to their great concerns, or main objects of cultivation. But it should be remembered that comparatively little concerns help to compose or make up the entire or great prosperity of a farming establishment; and that, although attention to fruit trees, grape vines, gardens, and the like, or those matters quite important to the comforts of a family, must be given for success, according to the maxim,—“what is worth doing at all, is worth doing well,”—yet, comparatively little time and cost is required. The neglect consists in omitting a few hours work in the critical time to the garden, vineyard, or orchard, which if promptly bestowed, would eventually save to the cultivator, the worth of many hours, or even days work, bestowed on cotton, or corn, or some great staple of the plantation.

There is another, and we consider a great evil, often growing out of these little neglects; in that of suppressing the spirit of agricultural enterprise and improvement. For instance, some choice plant, vine, or fruit tree is recommended and forthwith purchased by some farmer, too full of great cares to attend to little ones, in detail. It is planted, and the same attention and time bestowed upon it, perhaps, as upon a cotton or corn stalk, would have caused it to flourish to full expectation. But grass and weeds are suffered to be constant neighbors to it in the growing season; and it is afterwards reported to be worthless, and to have been puffed up by the vender, merely to make money. To guard against this evil, as to trees and vines, I would recommend that the ground, where growing, be cultivated a

due number of years, with some valuable crop of such kind as not to shade too much, nor to stand too near the individual plants.

A SUBSCRIBER.

[Communicated for the Farmer & Gardener.]

Dardenne, P. O. Missouri, Feb. 22, 1836.

Mr. Editor—Enclosed I send you another specimen of the chinch bug in compliance with your request. I searched in vain for living specimens in the same localities where I procured the other parcel; I could find there, only the inanimate remains or skeletons of the animal, which at christmas, was so sprightly and animate, when brought into the temperature of my family room. But after a tedious search, I at length succeeded in finding a few individuals in perfectly good condition, these together with a considerable number of dry skeletons are put up and forwarded to you as before. I ask pardon of you and of the readers of your journal, for having in my first communication on the subject of this insect, treated the subject in so vague and loose a manner, and my only apology for doing so is this: I had seen so many notices of the ravages of an insect called by the same name, published in agricultural papers, and even transferred to many of the political and commercial periodicals within the last four or five years past, that I had supposed this or at least some small insect, under the same cognomen, was generally known throughout your region of country; it is proper to observe, however, that so far as my information goes, its location was confined to the State of Virginia. I am not certain, however, that this last is identical with the insect known here by the same name, as I well recollect to have seen some notice of the red insect passing from the wheat field in shoals on the wing. Now I have never been able to detect our Missouri chinch bug on the wing, although I have observed its habits and movements pretty closely; it changes its locality by creeping, so far as I have observed, which it performs with apparent ease and expedition: it propagates throughout the feeding season, which is in ordinary seasons, from the middle of June until the frosts set in in the fall; it deposits its ova between the foot stalk and the stem of the wheat, oats, corn, and grasses of the same general structure, and they are probably hatched by the warmth of the already mature individuals, which congregate thickly in these situations, particularly if the weather be a little cooler than usual. I am of opinion, that it does not survive the winter in the egg state, as I cannot observe any thing like eggs in their winter quarters—but of this I am not positive. The living insects I found, were laid up in a stack of corn that was cut up at the ground, in the fore part of October, and has stood in the field undisturbed since.

There is no prospect of exterminating this insect by subjecting the seed wheat to any sort of process: it never ascends to the head of the wheat plant according to my observation. I however incline to the opinion, that by making a radical change in our mode of cultivating wheat, we might avoid the ravages of this insect in a great measure. The mass of the wheat made here is put on oats fallow, where many of the insects are to be found, and where they no doubt, remain in the shelter of the stubble, and other trash

left on the ground, and are there ready to commence the work of procreation as soon as circumstances render such measure proper. By substituting naked fallow for the oats fallow, we shall avoid in a great measure, if not entirely, the ravages of this insect; this system of farming I would not adopt of choice; but of evils, I am disposed to select the lesser. Be pleased to tender my thanks to G. B. Smith, Esq. for his promptness in examining and describing the former specimen of this insect, which I forwarded to you. With all due deference to that gentleman's superior acquaintance with natural history, I am bound to say, that he has pronounced a hasty and ill advised sentence of condemnation on the vulgar cognomen of this insect: it emits a strong pungent and offensive odor, not altogether unlike that which is emitted by the bed bug, and from which odor it has derived its name, therefore, according to one of the senses, at least, it bears a much nearer resemblance to the *chinch* than it does to the June bug.

Lest you and your readers should be led into error by my remarks on the cultivation of clover in my former communication, I will remark here, that I am far, very far from treating all my clover land in the same way as the piece then mentioned was treated: on the contrary I am cultivating clover extensively for the double purpose of forage and as a renovator of the soil. I do not, however, plough under so soon as you eastern people do, but let it stand some four or five years, and I think with advantage, taking the relative cost of labor, seed, and the price of their products into consideration. I laid down one of my principal fields to grass in the spring of 1830, cut four crops of hay from it, and last spring hauled out all the manure on the farm, spread it, and ploughed under the manure and the crop of grass, then from six to nine inches high, ploughed as deep as I could with 3 yokes of good steers, laid the furrow flat and smooth with a long barshare plough, then harrowed with the furrow, (rolling being unnecessary from the smoothness of the ploughing) then marked with a long sharp heavy plough, at 4 feet 3 inches across the furrow, taking especial care not to disturb the sod; then planted it by stakes at 4 feet across the marks, in corn on the sod; on the 10th of June, the corn came up admirably well, and when about a foot or 15 inches high, harrowed it effectually across the furrow with a heavy two horse harrow, the centre teeth being extracted and the horses driven on each side of the row, having long stretchers to the harrow, and a stick tied to the bit of the off side horse, and attached by its other end to the harness of the leading horse, to keep the horses apart from the corn: afterwards, the surface was scarified between the rows twice, that is once each way, and although from the peculiarity of the season the crop did not mature, it was doubtless the largest product that I have ever seen, although I have been accustomed from my infancy to the enormous products of the western country, when in its pristine vigor, including the choicest lands of old Kentucky.

Yours, respectfully,

JOHN SMITH.

§ The readers of the Farmer and Gardener, are respectfully referred to the advertisement of the great sale of stock, &c., by John Barney, Esq., formerly of Port Penn, Delaware.

§ We particularly call the attention of agriculturists to that part of Professor Ducatel's report published to-day. It shows very clearly that oyster shell lime as a manure, is nearly as effective as the very best alum stone lime, and superior to much of the article offered for sale.— This is a most important fact, and gives immense value to the inexhaustible calcareous deposits, recently discovered in the states of Maryland, Virginia, and North Carolina.

PROFESSOR DUCATEL'S REPORT.

(Continued.)

SECT. II. *Agricultural resources of the lower counties on the Eastern Shore of Maryland.*

The agricultural improvements of Dorchester, Somerset, and Worcester counties, fall far short of what they might be made to attain, by a better system of cultivation, and a more liberal employment of the resources which this section of the state possesses. But to effect a thorough improvement, the attention should be first directed to the congeniality of the soil, in each district, for that species of growth from which a crop is expected. Corn and wheat are the staple commodities of the Eastern Shore, but in the present condition of things, the latter is so precarious a resource, that corn may be said to be the principal produce and main dependence of the lower counties. But yet their various soils are capable of producing a number of other crops: rye, oats, beans, potatoes, (common and sweet,) and the root crops generally. But it is not only in limiting the variety of their crops, that the agriculturists of this section of country err; they neglect to take in account the peculiar susceptibilities of the various kinds of soil, to produce certain crops in preference to others; and thus an injudicious system of husbandry is followed, resulting most frequently in disappointment. On some of the light soils described as belonging to the upper portions of these counties, wheat cannot be raised, whilst the same soils may be made to yield profitable returns of corn, rye, and oats; it is therefore worse than useless to attempt to raise wheat upon such lands. The opinion that oats exhaust the soil, is an unfounded prejudice; for any system of rotation, with proper management, appears to be beneficial. Those parts, on the other hand, that possess a clay soil, with variable proportions of sand, admit of alternate extraction from them, of corn and wheat crops, provided they be followed up by the clover, cut and turned in with lime; or if grazed not too closely.

Another popular belief, founded upon prejudice, is, that plaster will not act upon lands contiguous to salt water. It is not so. Lands, whether near or remote from the sea, upon which gypsum did not seem to take kindly, have been found, *after being marled or limed*, to derive the useful benefits imparted by this valuable material.

In some parts of Somerset, a small portion it is true, as yet, the crop of sweet potatoes is the main one, and is found very profitable, as is evident by the thriving condition of the small farms on big and little Dee's island; whilst intelligent farmers, in other parts of the country, have

turned their attention advantageously to the cultivation of beans, peas, &c. But there is yet another growth that bids fair to become of great value to the agricultural interest of the Eastern Shore of Maryland, namely, the *palma christi*, or castor bean plant, sometimes known by the name of *mole plant*.

An attempt was made in the report of last year, to excite the interest of the farmers of Queen Anne and Caroline counties, in behalf of this new crop. It is to be regretted that they have not extensively, if at all, availed themselves of the suggestions—the bean having increased in value far beyond the most sanguine anticipations. There ought to be, therefore, no further delay to the introduction of this growth, as one of the staple commodities of Maryland. Without having been as yet able to ascertain the precise cause of the extraordinary demand for this article, within a year, there is still reason to believe that the call for it will continue to be great; since, notwithstanding its extended cultivation in consequence of the high prices obtained in preceding years, it now commands a higher price than at any other former period. It has been stated that the oil expressed from the beans is employed in large quantity in the manufactories of England for greasing the machinery by which these establishments are put into operation.

The culture of the *palma christi* presents no difficulties. It is said to thrive best in good corn lands, yielding, according to the quality of the soil, from twenty-five to forty bushels per acre. The land requires the same preparation as for corn, and the bean is planted like this grain,—in hills on which two or three plants are suffered to grow; the subsequent tillage being also the same as that practised for corn. The most tedious part of the management of this crop is the gathering of the fruit, which forms a cluster with a pyramidal termination; the lower portion being occupied by the male flowers, that yield no seed, and the upper by the female flowers; the ovary, which is roundish and three-sided, supports three linear reddish stigmas, forked at their apex. The fruit, properly speaking, is a round capsule, with three projecting sides, covered with rough spines, and divided into three cells, each containing one seed. The flowers appear in July, and the seed ripens throughout August and September. If suffered to do so on the plant, the capsule bursts with considerable force, projecting the seed at a distance, and scattering it about the field. To avoid this is the only extra attention required by this growth, and this is done by anticipating the maturity of the fruit. The directions are,—to visit the plantation a little before the commencement of the ripening season, removing those clusters that approach to maturity, (which is known by a change of color, from grayish green to a light pea green,) and conveying them to the drying ground, where, by the effect of the sun's heat, they burst, and dislodge their seeds. The only preparation for the drying ground is to provide a small place, cleaned and levelled as for a threshing floor, upon which the clusters are scattered. It would be advisable to locate this spot in the neighborhood of the barn, or near a shed, so as to facilitate the removal of the plants in case of protracted wet weather, to some shel-

tered situation. Transient showers of rain do not, however, damage it, otherwise than by blackening the seed, whereby its sale might be injured, although it does not diminish its productiveness in oil. The occupation of gathering having once commenced, it should be so arranged as to visit each plant twice a week, morning, and evening, until the whole crop has been secured. It may then be sent to a market, where, at the time of writing this Report, it commands three dollars a bushel; or, it may be made to yield its oil by the following process, as practised in Northampton county, Virginia.

The seeds are first to be thoroughly cleaned of dust, and of portions of the capsules that may have adhered to them. They are then introduced into shallow iron drawers, arranged on both sides of a furnace, where they are exposed to a gentle heat; the object of this first operation being to render the oil more easy of expression. From these drawers they are conveyed into a powerful screw-press, by the operation of which the oil is obtained. So far, however, the oil is impure: it must now, therefore, be transferred to clean iron boilers, previously supplied with water. As the boiling proceeds, the impurities that rise to the surface are skimmed off, and the clear purified oil finally makes its appearance, floating on the water. It is now carefully removed, and a second time subjected to the boiling process, with a very small quantity of water, until the latter liquid has been entirely dissipated. This is ascertained by taking out a small portion into a vial, and observing whether it preserves its transparency as it cools. Some care is required not to push the heat too far, as then the oil would acquire a brownish hue and a hot peppery taste, which would at all events unfit it for use as a medicine. One bushel of seeds yields about one gallon and three-quarters of oil, at an expense of about 25 cents a bushel, which is refunded by the sale of the *pumice*, found to be an excellent manure for corn crops. Acknowledgments are due to Mr. Smith, of Northampton county, Va. an intelligent and experienced planter of *palma christi*, and manufacturer of castor oil, in the vicinity of Eastville, for the information contained in the above paragraphs.

It is needless, after what has just been said, to expatiate upon the value of this plant. That the soil and climate of at least the lower portions of the Eastern Shore of Maryland, are congenial to its growth, cannot be doubted. The praiseworthy example (crowned, it is believed, with entire success) has already been set to the inhabitants of Somerset, by one of the most intelligent farmers of the county—Col. Arnold E. Jones.

Persons well acquainted with the cultivation of rice confidently assert and believe, that there are many spots on the Eastern Shore of Maryland, well calculated to the production of this important agricultural commodity. Rice has been raised in Maryland, in the vicinity of Salisbury, at the head of the Wicomico, and a promising attempt, the result of which has not been ascertained, was recently being made opposite Vienna, on the Nanticoke. It would seem desirable to encourage such attempts, as further conducive to the practical illustration of the possibility of reclaiming a vast body of lands at present of little value.—

These are the marshes and cripples that occur on

the margin of the large rivers on the Eastern Shore of Maryland. An examination of the actual condition of these marshes justifies the belief that they might, to a certain extent, be drained; whether sufficiently to be made permanently arable, or only to the extent of serving as more firm and safe pasturages, remains to be tried. It is thought that the single operation, though one not unattended with difficulties, of diverting a part of the course of the river so as to cause it to pass between the marsh and the main land, would greatly contribute to their drainage. This appears from the fact, that their most elevated parts are those contiguous to the river, inclining moderately towards the firm land, adjoining which the marsh is always found to be the softest, and more liable to a total submersion. By insulating these bodies of land, always more or less miry, and thus establishing a drainage around them, it is possible they might eventually acquire sufficient consistence, without having recourse to embankments, to afford safe and valuable pasture grounds. The cripples seem irreclaimable by any other means than by embankments,—an operation deemed practicable by those who have given much attention to the subject, and who represent them as best fitted for the cultivation of rice.

Such are the agricultural resources of the lower counties of the Eastern Shore of Maryland, so far as the productiveness of the soil, and its susceptibility of improvement are concerned. It has already been stated, that the only incidental resource possessed by this section of country, is to be derived from the facilities of obtaining calcareous matter (in which the soil is essentially deficient) from the shell banks, oyster banks, and other sources already referred to. But before any hope can be indulged, that the inhabitants of this portion of the State will avail themselves of these means of bringing their lands into a higher state of cultivation than they seem to have any idea that they are capable of, it is necessary to remove a fatal impression, too generally made, that the lime derived from shells is of but little value.—The result of the inquiries made to disprove this opinion, will be given in the next section of this report.

An error equally fatal prevails among the citizens of Maryland, in reference to the counties that have just been passed in review,—that they are as devoid of interest as they have been believed to be of resources. It is hoped that the minute, and, at the same time, faithful account given of them—more minute than would otherwise have seemed necessary—will have a tendency to rectify the false judgment so commonly passed upon this portion of our territory, and contribute likewise to cheer those of its inhabitants who have become disheartened at the present aspect of things, and who are too prone to believe that their industry could be better rewarded at a distance. Industry meets with its just reward every where; but the assertion is safely ventured, that the same amount of enterprize at home, would secure more comfort and happiness, than, under any circumstances, can be expected in a newly settled country, where all that is obtained is at the cost of solid enjoyments. The adventurous merchant and speculator may find a wide field in the "Far West" to satiate, if possible, his thirst for wealth; but the industrious farmer, on the tide waters of

the Chesapeake, needs no better patrimony than that which he already possesses. A soil easily cultivated, and very improvable, having the means of improvement at hand; the necessities, and even luxuries of life in abundance; a temperate and healthy climate; a free and constant intercourse with a large commercial emporium, by means of a water communication reaching to the very door of his granaries; surrounded moreover by intelligent neighbors, and a peaceful and orderly population—such are the advantages of which he can boast, as a set-off against those of any other section of our country. It is full time that he should learn to appreciate them himself.

SEC. III. On the comparative value of shell lime and stone lime.

The opinion seems to prevail among Maryland farmers of all grades, that the lime obtained by the burning of oyster, or other marine shells, is very far inferior for agricultural purposes to that procured from limestone. Hence some have been induced to give the preference to an article sold as lime, and offered at reduced prices, over a much purer, and even cheaper lime, because obtained from oyster shells; whilst others, beyond the reach of stone lime, and having abundant facilities for procuring shell lime, have neglected the latter altogether as almost worthless. It becomes necessary, therefore, to rectify public opinion as to the precise relative value of the two substances—at least for agricultural purposes. In the absence of direct experiments attention must be turned to the identity in nature, or the difference existing between them, and the conclusion drawn from the general principle, that bodies similarly constituted will, under the same circumstances, produce analogous effects.

In the first place, then, it will be admitted, that lime (by which the chemist understands a definite and invariable compound) is the same, from whatever source it may be derived; but the lime of commerce is an indefinite and a variable article. The sources whence the latter is usually procured for economical purposes, are, where it occurs in combination with a gas, called the carbonic acid gas; because it is found that by the simple application of heat, this gaseous body may be dissipated, leaving the lime, either perfectly pure, or charged with such impurities as the material employed originally contained. The purer the material then, the purer will be the lime.—Now the purest of all the compounds of carbonic acid and lime, is that substance called by mineralogists *calcareous spar*, and the variety of lime stone, that approaches this the nearest, is the *alum limestone*. Supposing this to be a perfectly pure carbonate of lime, it has been ascertained that the carbonic acid exists in it in the proportion of 22 to 28 of lime, or 44 to 56; so that every 100 pounds of the carbonate will yield 56 pounds of lime. This is the greatest quantity of pure lime that can be obtained from any limestone.

Next, by a careful analysis of 100 grains of pulverized oyster shells, it has been shown by Professor Rogers that they contain:

Carbonate of lime,	-	-	-	95.18
Phosphate of lime,	-	-	-	1.88
Silica,	-	-	-	.40
Water,	-	-	-	1.62
Insoluble animal matter,	-	-	-	.45
Loss, &c.	-	-	-	.47

100.

If we attend only to the carbonate of lime, it is seen that 100 grains of an oyster shell contain 95 grains; or 100 pounds of shells will contain 95 pounds (leaving out the fractional numbers) of lime combined with carbonic acid, which, when burnt, will yield 53.4 pounds of lime. Here is the difference in *quantity* of lime furnished by the same weight of the two materials.

What now is the difference in *quality*? Besides carbonate of lime, the oyster shells have been found to contain *phosphate of lime*, silica, water, and insoluble animal matter, the whole amounting to 4.35 parts in a hundred. But the phosphate is an improvement to it—the fertilizing property of bones being in a great measure ascribed to the phosphoric acid, which they contain in combination with lime; the water is driven off as vapour; so that there remains 85 hundredths of impurities in the form of silica, or sand, and insoluble animal matter. Oyster shell lime differs therefore in *purity* from the alum lime by the 85 hundredths of a pound on every hundred pounds; and this is the precise difference in *quality* between them, supposing the alum limestone to be a perfectly pure carbonate of lime, which is seldom the case. But is the lime thrown into the market for agricultural uses always obtained from pure alum limestone? The following table exhibiting the analysis of ten specimens of limestone from Baltimore, Harford, and Frederick counties, from which the Maryland farmers derive their principal supply, will show that it is not.

Analyses of ten specimens of Limestone, from Baltimore, Harford, and Frederick counties.

	No 1	2	3	4	5	6	7	8	9	10
Carbonic acid	42.	46.	43.	43.	43.5	39.	42.	47.	43.5	41.
Lime,	54.	30.	55.	55.	55.5	49.	54.	31.	55.5	29.
Magnesia	"	13	"	"	"	"	"	18.	"	17.
Silica	4.	6.	2.	2.	1.	11.	2.	2.	1.	9.
Undetermined	"	"	"	"	"	1.	2.	2.	"	"
Oxide of iron	"	"	"	"	"	"	"	"	"	4.
	100	100	100	100	100	100	100	100	100	100

It will be perceived that three out of ten are magnesian limestone; all of them contain more silica or sand than has been found in oyster shells, and one, said to be most extensively used in Harford county, contains as much as eleven per cent. of inert matter. It follows, therefore, that, as oyster shells are composed nearly of pure carbonate of lime, they will afford a lime containing scarcely an appreciable quantity of impurities. If well burnt, (which is the case when no effervescence is observed on treating them with a weak acid,) lime obtained from them may be deemed, with a fractional difference, equal, weight for weight, to the best stone lime; and as their chemical composition does not vary, there is nothing to be deducted from the value of the product in consequence of the impurities that exist, as exhibited by the foregoing table, in most limestones, and that must necessarily form a part of the residue when these are burnt.

If the comparative value of the two products be estimated by measure, a greater difference is discovered; but there is at the same time a disproportionate difference in price. A bushel of the best alum-lime weighs from ninety to a hundred pounds; whereas, the same bulk of shell lime, unground, weighs from sixty to seventy-five pounds, and perhaps when ground would weigh eighty pounds,—a difference of from 20 to 25 per cent. But the former costs from thirty to thirty-five cents at Baltimore, the most convenient

spot for its delivery on tide-water, where the latter can be had for ten cents; whilst farmers, conveniently situated on the bay side, might themselves burn the shells at an expense not exceeding six cents a bushel. These remarks refer to the lime obtained from recent or fresh oyster shells; but there is little or no difference between it and that procured by the burning of those contained in the Indian shell banks, provided proper care be taken to separate them from the black mould and dirt with which they are mixed.

It has been supposed, that because alum-lime has been found to admit of a greater admixture of sand than shell lime, in the making of mortar, it was to be inferred that it is correspondingly better, or, as it is termed, *stronger* for agricultural purposes. But this is an unwarrantable conclusion; for, as this circumstance seems to depend upon the peculiar aggregation among the particles of the lime, which prevents it from *setting* too rapidly, (or, in other words, attracting, water and carbonic acid from the atmosphere sooner than the wants of the mason require,) it would appear, on the contrary, that, if any inference is to be drawn from it, it is adverse to the conclusion; whilst, on the other hand, the fact that shell lime *sets very quickly*, is favorable to the opinion, entertained by some persons, of its superior efficacy in agriculture,—it being generally understood that lime acts in the soil in the condition of carbonate of lime. Admitting, however, that the peculiar arrangement of the particles in stone lime which renders it in general coarser than the lime obtained from shells, may better fit it as a mechanical amendment to certain soils, the difference is at most as one to three, according to the datum upon which its superiority is predicated; namely, in the preparation of mortar, stone lime will bear three times as much sand as shell lime. But even in this respect the conclusion is not warranted, except perhaps in the case of a purely sandy soil, in which lime *alone* would, it is believed, prove of little service.

An effort was made, in the preceding Report, to bring into more general notice the laudable efforts of some citizens in Kent county, to extend the use of the lime obtained by burning the contents of those extensive accumulations that have now so frequently been alluded to, as occurring in numerous localities upon our tide-waters. The lime derived from this quarter, it has already been said, can be made nearly, if not quite equal, to that obtained from the fresh shells. It is, at all events, very far superior to most of the stone-lime recently introduced amongst the farmers of Maryland, from an adjoining State, and eagerly purchased at a reduced price. The following result of the analysis of a specimen of *stone-lime* from the Schuylkill, lately bought by a gentleman of Harford county, at fourteen cents a bushel, will serve to give an idea to what extent the farmer may be deceived in the purchase of articles of which he does not know the nature.

Analysis of a specimen of STONE LIME from the Schuylkill.

Lime,	-	-	-	49.
Magnesia,	-	-	-	24.
Carbonic acid,	-	-	-	12.
Alumina,	-	-	-	4.
Iron,	-	-	-	1.5
Silica,	-	-	-	5

Water, - - -	7.
	100.

This article is so impure, that even had it been fully burned, it would have contained only about fifty-nine per cent. of lime; and yet many thousands of bushels of it have been purchased by farmers on tide-water, who might have supplied themselves with shell lime of infinitely superior quality, at less than two-thirds of the price. Shell lime of very good quality is burned at Worton point, at the mouth of Fairlee creek, and on the Chester river, in Kent county, which is advertised to be delivered any where within fifty miles at nine cents per bushel.

No direct experiments are known to have been made that would infer the conclusion to be drawn from the preceding statements; namely, that for agricultural purposes, there is scarcely an appreciable difference, weight for weight, between shell lime and stone lime of the best qualities.—Whilst, on the contrary, it is not at all improbable, that if any economical way could be devised of reducing the recent shells to powder, as effectually by mechanical means as by burning, they would be found, in consequence of the presence of phosphoric acid, to possess superior efficacy in the soil to the best alum-lime. At all events, enough is known of the nature of oyster shells, (and that of the clam is nearly alike) to cause them to be regarded as an abundant source of excellent lime. Any further delay, therefore, on the part of farmers living on the tide-waters of the Chesapeake bay, in employing them for the purpose of procuring and applying this essential deficiency in their soils, can only arise from a wilful disregard and neglect of the resources placed within their reach.

CULTIVATION OF VEGETABLES.

Artichoke.—This is a fine vegetable. It is perennial, a native of the south of Europe, and can be raised from seed sown early in April, or from young suckers slipped off the bottom of old plants in the spring. Plant these in rows four feet apart, placing them in clumps of three or four in each, two feet asunder in the rows. Artichokes require a deep soil, and before they are planted, the ground should be well manured, and trenched two feet deep: this operation should be performed in April, as soon as the young leaves begin to show themselves above the surface of the ground. After this, the plants will require only to be kept clear from weeds during the summer, and to be protected from frost.—*Lindley.*

The flower heads in an immature state, contain the part that is used, which is the fleshy receptacle, called the bottom, freed from the bristles and seed-down. When ready for cooking, soak them in cold water, wash them well, then put them into plenty of boiling water, with a handful of salt, and let them boil till they are tender, which will take from an hour and a half to two hours; trim them and let them drain on a sieve; serve up with melted butter.

Asparagus.—There are various methods pursued in forming new plantations of Asparagus: the most common one is to trench the ground from two to three feet deep, mixing with the soil

a good quantity of rotten dung. If the soil be good to the depth of three feet, it will not be necessary, under the ordinary culture, to prepare the ground deeper; but in doing this, a large portion of manure is necessary, and it will be requisite that it should be regularly mixed with the soil from the bottom of the trench to the top. If one of the quarters of the garden should be required for Asparagus alone, the whole ought to be trenched and manured as if it were for only one single bed, as the roots spread themselves in all directions, and by penetrating the alleys between the beds the outer rows of heads will always be finer than those in the middle. The ground being prepared, the beds should be set out of the width of five feet, with three feet alleys, fixing a strong stake at the corners of each bed, driven down to the depth of three feet. About the beginning or middle of April, proceed thus to plant the beds: strain a line round the four corners of the first bed, cut it down perpendicularly on the inside of the line to the depth of three inches, and take out the soil, which must be laid on the alleys on each side, levelling the surface perfectly even; but take care not to stand upon the bed; on the contrary, keep the soil as light as possible: mark out four lines, at a foot from each side of the bed, and a foot from each other: measure a foot from the end of the bed, and mark each line a foot apart, thus forming squares of twelve inches each way. Being now provided with some good one year old plants, (not more,) open the roots flat, place one plant on each of those places marked on the lines, and fasten it down with a handful of mould to keep it in its place: when this is done, the bed must be filled up level with the spade. This being finished, proceed with the other beds in like manner, till the whole is completed. A bed of twenty yards long, thus planted, will require 235 plants; and when of three years' standing, will furnish heads equal in size to these generally produced in our best gardens. If still larger heads than these should be desired, they may be produced by planting the four rows at fifteen inches between the plants in the row instead of twelve; and if this is done, it will be of greater advantage if the plants are placed in the *quincunx* manner; that is, by placing the first row of plants fifteen inches from the end, and fifteen inches apart; the second row twenty-two inches and a half from the end, and fifteen inches apart; the third row fifteen inches from the end, and fifteen apart; and the fourth row twenty-two inches and a half from the end, and fifteen inches apart. The plants will thus form rhomboidal squares, instead of rectangular ones. A bed thus planted will require 136 plants.—*Lindley.*

Asparagus is sometimes found in stony and gravelly situations, near the sea in England, and is very abundant in parts of Russia and Poland, where it is eaten by cattle as grass. It was a luxury among the Romans, and they had a large growing variety which required only three heads to weigh a pound. It is cultivated most extensively for the London markets; and it is said one grower alone has had eighty acres entirely under this crop: they raise it in great perfection, as five of their largest heads have weighed a pound.—The earliest asparagus brought to the New York market is grown at Coney Island, about nine miles from the city; the soil is formed almost

entirely of sea sand, a fresh coating of which is put on every season; an application of swamp earth is also found to promote the growth of asparagus; but though this plant grows naturally in poor sandy soil, it is found that the sweetness and tenderness of the shoots depend very much on the rapidity of their growth, which is greatly promoted by the richness of the soil.

The following directions for cooking asparagus may perhaps be useful to somebody.—Scrape the stalks clean, wash them in cold water, and tie them with bass or tape, into little bundles of about a dozen each; cut off the stalks at the bottom that they may be all of a length, leaving only just enough to serve as a bundle for the green part. Have a stew pan on the fire with a plenty of water; sprinkle in a handful of salt; let it boil and skim it: then put in the asparagus; when the stalk is tender, which will be in from twenty to thirty minutes, they are done enough. Great care must be taken to watch the exact time of their becoming tender; take them up just at that instant, and they will have their true flavor and color; a minute or two more boiling destroys both. Serve up with melted butter, or have it separate in a sauce-boat.—*Küchenener.*

The following notice of, and directions for sowing this fine grass, will be found interesting to such of our readers as may desire to make an experiment in its cultivation. We copy it from a circular of G. C. Thorburn, Esq.

LUCERNE, OR FRENCH CLOVER.

Few articles of foreign introduction have ever succeeded so well as this valuable Clover; many of the first agriculturists in our country have, and still continue to cultivate it with increasing success. We could give the most respectable names as references; but would merely mention J. Buel, Esq. of Albany, who has given it a fair trial, and is fully satisfied of its excellent properties, and great usefulness to the farmer; and V. Livingston, Esq. Greensburgh, N. Y. The following is from James Byrd, Esq. Flushing, Long Island, who has cultivated it for the last ten years. He has kindly communicated to us the result of his latest experience, which we recommend to the attention of all agriculturists. Mr. B. is well known as one of the best farmers on Long Island, and what is not a little creditable to his skill and horticultural abilities, he beat Cobbett completely during the Ruta Baga war a few years since. Mr. C. acknowledged that Mr. Byrd's mode of culture and returns exceeded his; and he was struck with admiration when viewing his well kept field, and the superior quality of his turnips.

FLUSHING 2 mo. 1834.

RESPECTED FRIENDS,

I now hand you a particular statement how I managed my Lucerne.

1831. I this spring sowed twenty pounds of seed on my wheat about the time clover is usually sown, and harrowed it both ways with a sharp heavy iron-tooth harrow. It came up well, and produced three good crops of hay the following year.

1832. Harrowed the lot three times over, and in order to see whether it proved injurious, I had part of it done six times over. I did not find that

it injured the plants, but it had this good effect, that it killed nearly all the weeds and natural grass, and was very beneficial to the Lucerne.

1833. Had it well harrowed again this spring, and had three good crops of hay. I weighed part of the first crop after it was well cured, and found it produced nearly two and a half tons per acre.

The harrow ought to be made in two parts, and hung together with hooks and eyes, it being much easier to clear them from grass than when made in the usual way, and, in my opinion, are much better for all purposes; it ought to be so constructed as for the teeth not to follow each other. Be careful to pick up the stones after every harrowing, and it would be well to harrow it after every mowing. Light, dry land is best for the grass. Unless the land is very level, I think it would be best to place it in ridges twenty feet wide. If sown in ridges, it must be harrowed the long way. The clover ought to be raised 8 or 10 inches above the harrow, in order that it may run level, otherwise it will injure the plants. I had mine made with notches, to regulate the height. I am convinced that the best way to prepare land for Lucerne is to plough in plenty of manure in the spring, and plant it with corn, having it well ploughed and hoed, so as to be kept perfectly clean. In the fall, after taking off the corn, sow wheat, manured with ashes.

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank, par		VIRGINIA.	
Branch at Baltimore,....do		Farmers Bank of Virginia 2a2	
Other Branches,.....do		Bank of Virginia,.....do	
MARYLAND.			
Banks in Baltimore,.... par		Branch at Fredericksburg do	
Hagerstown,.. ..2a		Petersburg,..... do	
Fredrick,.....do		Norfolk,.....do	
Westminster,.....do		Winchester,.....do	
Farmers' Bank of Mary'd, do		Lynchburg,.....do	
Do. payable at Easton,....do		Danville,.....do	
Salisbury,.... 5 per ct. dis.		Bank of the Valley,.... do	
Cumberland,.....2a		Branch at Romney,.... 3	
Millington,.....do		Do. Charlestown, do	
DISTRICT.			
Washington, } Banks, 1.		Do. Leesburg,.....do	
Georgetown, } Banks, 1.		Wheeling Banks,1a2	
Alexandria, } Banks, 1.		Ohio Banks, generally 2a3	
PENNSYLVANIA.			
Philadelphia,.....2a		New Jersey Banks gen. 1a2	
Chambersburg,.....2a		New York City,.....4a	
Gettysburg,.....do		New York State,....2a3	
Pittsburg,.....1a2		Massachusetts,....2a2½	
York,.....2a		Connecticut,.....2a2½	
Other Pennsylvania Bks. 1a2		New Hampshire,....2a2½	
Delaware [under \$5]....3a4		Maine,.....2a2½	
Do. [over 5].....2a2½		Rhode Island,2a2½	
Michigan Banks,.....5a		North Carolina,2a3	
Canadian do.....5a		South Carolina,....2a3	
		Georgia,.....3a3½	
		New Orleans,..... 4	

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BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM.	TO.
BEANS, white field,.....	bushel.	—	—
CATTLE, on the hoof,.....	100lbs.	8 00	8 75
CORN, yellow,.....	bushel.	—	70
White,.....	"	68	60
COTTON, Virginia,.....	pound.	—	—
North Carolina,.....	"	—	—
Upland,.....	"	18	18 1/2
FEATHERS,.....	pound.	45	—
FLAXSEED,.....	bushel.	—	1 37
FLOUR & MEAL—Best wh. wh't fam.	barrel.	7 75	8 25
Do. do. baker's,.....	"	7 50	8 00
Do. do. Superfine,....	"	6 75	7 12
SuperHow. st. in good de'd	"	6 87	—
" wagon price,.....	"	6 75	—
City Mills, extra,.....	"	—	7 00
Do.	"	6 87	—
Susquehanna,.....	"	—	—
Rye,.....	"	—	—
Kiln-dried Meal, in hhd.	hhd.	—	—
do. in bbls.	bbl.	—	5 25
GRASS SEEDS, red Clover,.....	bushel.	—	—
Timothy (herds of the north)	"	—	—
Orchard,.....	"	none	—
Tall meadow Oat,.....	"	—	—
Herds, or red top,.....	"	—	—
HAY, in bulk,.....	ton.	18 00	20 00
HEMP, country, dew rotted,....	pound.	6	7
" water rotted,....	"	7	8
HOGS, on the hoof,.....	100lb.	9 00	9 25
Slaughtered,.....	"	—	—
HOPS—first sort,.....	pound.	18	—
second,.....	"	16	—
refuse,.....	"	14	—
LIME,.....	bushel.	33	35
MUSTARD SEED, Domestic,.....	"	—	—
OATS,.....	"	45	47
PEAS, red eye,.....	bushel.	—	—
Black eye,.....	"	—	—
Lady,.....	"	—	—
PLASTER PARIS, in the stone,....	ton.	—	5 50
Ground,.....	barrel.	1 50	—
PALMA CHRISTA BEAN,.....	bushel.	—	—
RAGS,.....	pound.	3	4
RYE,.....	bushel.	90	92
Susquehanna,.....	"	92	—
TOBACCO, crop, common,.....	100 lbs	5 00	5 50
" brown and red,....	"	5 00	7 00
" fine red,.....	"	—	9 00
" wrappery, suitable	"	—	—
for segars,.....	"	5 00	10 00
" yellow and red,....	"	6 00	8 00
" good yellow,....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality,....	"	4 75	5 00
" ground leaf,....	"	5 00	8 00
Virginia,.....	"	7 00	14 00
Rappahannock,.....	"	—	—
Kentucky,.....	"	8 00	14 00
WHEAT, white,.....	bushel.	1 50	1 60
Red,.....	"	1 40	1 48
WHISKEY, 1st pf. in bbls.	gallon.	37	37 1/2
" in hhd.	"	36	—
" wagon price,.....	"	33	33 1/2
WAGON FREIGHTS, to Pittsburgh,....	100 lbs	2 75	—
To Wheeling,....	"	3 00	—
Wool, Prime & Saxon Fleeces,....	pound.	55 to 68	30 32
Full Merino,.....	"	48 55	28 30
Three fourths Merino,....	"	45 48	26 28
One half do.....	"	40 45	24 26
Common & one fourth Meri.	"	36 40	22 24
Pulled,.....	"	38 40	23 24

A GARDENER.

A person possessing a general knowledge of gardening in all its branches, and of farming, is desirous of obtaining a situation in the above capacity. He can give the best recommendation as to character and capacity—Address applications to W. B. through the editor of this paper. All applications by letter to be post paid.

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BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured....	pound.	15	17
Shoulders,.... do.....	"	12	—
Middlings,.... do.....	"	13	14
Assorted, country,.....	"	—	13 1/2
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,.....	"	20	22
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old....	each.	4 50	6 00
Cows, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	—	1 75
CHOP RYE,.....	"	—	1 87
EGGS,.....	dozen.	—	12
FISH, Shad, No. 1, Susquehanna,....	barrel.	—	—
No. 2,.....	"	3 75	4 00
Herrings, salted, No. 1,.....	"	—	—
Mackerel, No. 2, 8 25a 8 50; No. 3	"	6 25	6 50
Cod, salted,.....	cwt.	3 00	3 25
LARD,.....	pound.	14	—

GREAT SALE OF STOCK BY AUCTION.

MR. JOHN BARNEY, formerly of Port Penn, Delaware, having given up his establishment at that place, intends selling all his stock thereon, remaining unsold, at public auction, on TUESDAY THE 5TH OF APRIL, NEXT. They consist of First, upwards of 50 GENUINE BAKEWELL SHEEP. It has been the peculiar pride of Mr. Barney, for about thirty years to rear this animal in its greatest purity and perfection, and the unexampled success he has met with in securing the best prices in every market within his reach, is perhaps, the best evidence which could be asked to attest its superiority. The Bakewell sheep are so well known, and so universally admired for their length and quantity of fleece, and delicious quality of mutton, that it is superfluous to dwell upon their high claims to popular favor, and the confidence of judges. In the prosecution of this, his favorite pursuit, Mr. Barney has spared no pains nor money to effectuate his object. Regularly every two years he has imported a Bakewell Buck from England, which have always been selected by a confidential friend and competent judge. From one of those Bucks thus imported, we have a sample of wool nearly twelve inches in length, and which Buck is the sire of a part of his present flock, having sold him last summer for \$200 to General Garrard of Kentucky. Among the sheep which Mr. Barney will offer for sale on the 5th proximo, is an IMPORTED BAKEWELL BUCK, an animal which, when we saw him in October last, looked at a distance like a barrel enveloped in wool. In size, weight of fleece and beauty of form, he is equal to any thing of the kind we have ever seen.

Secondly. There are between 50 and 60 MILCH COWS and HEIFERS; most of which are of his own raising, and have had the advantage of his judgment in breeding. His object so far as the cow-kind are concerned, has always been to rear DEEP MILKERS with carcasses that would command a good price when cast off for slaughter. Among his present lot of cows, there are some that yield FIFTEEN to TWENTY, and in one instance, TWENTY-SIX quarts a day. These cows are judicious crosses of the Durham, Devon, Simms' and Girard breeds, all of imported origin and excellent families. The fame of the Durham cows for yielding full supplies of milk are too well known to need a remark; nor is the Simms' breed without high claims to pre-eminence as great milkers. Many of the cows have calves and others are in calf, most of them by a Durham bull of pure strain.

Besides these, there are several pair of EASTERN WORK OXEN, first rate and large size; two good BREEDING MARES in foal; several COLTS from 1 to 2 years old, and very promising; a number of BREEDING SOWS and PIGS. A Family Dearborn Wagon, gig, wagons, carts, ploughs and harrows.

ALSO

A fine thrashing machine of 4 horse-power, house-hold furniture, kitchen do., corn, wheat and rye by the bushel, and a crop of rye in the ground.

Terms made known at sale.

The editor of the Farmer and Gardener will attend the sale if encouragement offers, and will be happy to receive orders to purchase for any gentleman who may desire his agency.

March 22

2t

x Clefts hot, or clefts by which the harrow is drawn

THE VIRGINIA CORN AND COB CRUSHER AND GRINDER.

THE subscriber having obtained a general privilege (and for certain territory an exclusive right) to make, use, and vend to others to be used, the Patent VIRGINIA CORN AND COB CRUSHER AND GRINDER, which was recently noticed in the Farmer and Gardener, is now manufacturing them, and will be prepared, in a few days to furnish this useful Machine, made in the best style.—Price \$60.

This Machine is constructed principally of cast-iron, is made in the most substantial and durable manner, and is not easily put out of order. With the application of a two horse-power, it is competent to reduce from 15 to 20 bushels of corn and cob to a suitable state to mix with cut straw, corn stalks, hay, or fodder, in an hour; and by hand-power, from 4 to 6 bushels an hour.

Those who have been accustomed to the feeding of stock need not to be told, for they are already aware, that the advantages of such a Machine, on a large estate where many domestic animals are kept, are almost incalculable; and to those who have small establishments it will prove of great value, as, besides saving at least three-fifths of the feed, it will enable them to dispense with the necessity of sending their grain to mill to be chopped.

JAS. MOORE,

Maryland Agricultural Repository,
Light st. Baltimore.

mh 22

POTATO OATS.

100 Bushels seed potato oats—a choice article—for sale by JAMES MOORE,

Light, near Pratt st.

Mh 22

at the Maryland Agricultural Repository.

FARMERS' REPOSITORY.

No. 36 W. Pratt-street, Baltimore, Jan. 25, 1830.

THE proprietor avails himself again of the commencement of a New Year, to express his grateful thanks to his numerous friends and customers for their kind and liberal support of his Agricultural Establishment, and is happy to say that his ceaseless exertions to accommodate the public, have not been without a corresponding encouragement from them, and with his present improvements and Machinery, he is able to manufacture his Agricultural Implements much better than formerly, and with greater facility, and hopes to merit continued patronage. He now presents to the public an article new in its construction, for grinding corn and cob for feeding horses and stock. To those who approve this mode of feeding, this machine is worthy their attention. Also, Corn Shellers to be worked by hand or horse-power. He has a variety of Straw Cutters; but his own patented Cylindrical Straw Cutter is not surpassed by any other implement of the kind in existence; he has recently made some improvements in their construction, which adds to their cost, and for which he has been obliged to add a trifling advance on the price of the small size:—his prices for them being as follows, viz:

11 inch Revolving Bottoms \$30, with extra pair of knives.	\$33
11 " Permanent Bottom 23, do do do	31
13 " Permanent Bottom 43, do do do	48
13 " Revolving Bottom 45, do do do	50
15 " Revolving Bottom 50, do do do	56
20 " Large size fitted for horse-power 80, do do	90

His variety of Ploughs embraces almost every description and size that are worthy of notice, from a small seed Plough to the large rail road Plough—Gideon Davis' Improved Ploughs in all their variety, with cast and wrought shares; these castings are now made on his own premises, of the best stock and with special care; a supply of them always on hand to sell separate from the ploughs when required. Ox Scrapers for levelling hills, &c.; common and patent Wheat Fans; Fox & Borland's spring concave Thrashing Machines, large and small size, and portable horse powers for the latter; also one of Z. Booth's 2 horse Thrashing Machines and stationary horse power for the same; Brown's vertical patent Wool Spinners, and Watson's patent Washing Machine, both very simple and useful machines for families; Harrows; double and single corn and tobacco Cultivators; superior grain Cradles; and a great variety of other farming implements of a prime quality, and all on reasonable terms, at wholesale and retail.

Likewise in store—Orchard Grass, Timothy, and Herds Grass Seed of superior quality.

mh 22—eo2m

JONATHAN S. EASTMAN.



FIELD & GARDEN SEEDS, &c.

WARRANTED GROWTH, 1835.

THE subscriber has just received and is now opening a large and superior assortment of GARDEN and RARE FIELD seeds, growth 1835.

All those seeds which can be raised to advantage in this country, are saved by careful seed raisers at the *Clairmont Seed Gardens*, near this city. Seeds which are found necessary to import are principally from the south of Europe, where they become so well matured, that their vitality is preserved much longer than those obtained from the humid climate of England.

Of the endless variety of Cabbages, Lettuce, Peas, Beans, Cucumbers, &c., none are retained but such as are known to be truly excellent.

The most prominent seeds received, and in store, are 250 bushels Garden Peas of various sorts. 95 bushels Dwarf and Pole Beans. 2000 lbs. Cabbage Seeds. About 35 fine sorts, among which are the Scotch Early York, London Bittersea, Flat Dutch, Globe Savoy, Early Harvest, &c. 150 lbs. Cucumber seed, about 12 sorts, among which are Keene's Long Green, Long Green Turkey, &c. 1800 lbs. Radish seeds—principally of Short top Scarlet, Yellow and Red Turnip.

300 lbs. Beet and Mangel wurtzel seed. 50 lbs. Green Curled Broccoli, or Scotch Kale, purple curled—blue curled, &c.

35 lbs. Cauliflower and Broccoli—best European sorts. 200 lbs. Carrot seed—for garden and field.

75 lbs. Lettuce seed—the curled Silecia, large white or Lazy, brown Dutch and Malta, are best sorts, the latter particularly fine for forcing. 270 lbs. Onion seed—several French and American sorts. Also—Tart Rhubarb seed, Tomato, Egg plant, Squash, Black and Orange Salsafy, Spinach, Peppers, Ockra, Flag Leek, Cress, Celery, Endive, &c.

FIELD SEED.

60 bush. English and Italian Rye grass seed. 50 do Green Sward grass, for yards, &c. 1,200 lbs. Scarlet Trefoil or clover, Trifolium Incarnatum. 800 lbs. Lucerne or French clover.

50 bush. English and Poland oats. 250 lbs. Skinless or Huskless oats—new—great product. 150 bush. best English and American Early Potatoes.

100 lbs. Gama Grass seed—this grass bears cutting every 15 days, and of course the product is immense. 50 bush. White and Yellow Field corn.

ROBERT SINCLAIR, Jr. Seedsman,
Light st. near Pratt.

THE SILK MANUAL.

JUST published and for sale by Sinclair & Moore and Robt. Sinclair, Jr., at the Maryland Agricultural Repository, Light near Pratt street, Baltimore, a complete Manual of the Silk Culture, in which plain instructions are laid down for the culture of the Mulberry, the feeding of the Silk worms, management of the cocoons, reeling, spinning and dying of the Silk. In fine, it is a perfect Manual, and comprises every department of the business. The rules are arranged in so plain and methodical a manner that every one can understand them, and by a very few hours attention become master of the business. It is clearly demonstrated in this Manual, that largely upwards of \$500 may be netted from an acre in the Culture; and it is a singular fact connected with the Mulberry as adapted to the making of Silk, that poor dry, sandy, or gravelly land suits it best, the fabric made from worms fed on leaves raised on such soil, being greatly superior in elasticity and richness of gloss to those grown on rich grounds.

Price—per copy, 50 cents.
Liberal discounts made to the trade.

RUFFLE OATS,

For seed, may be had at the Maryland Agricultural Repository, Light street, Baltimore, by application to mh 22 JAMES MOORE.

AGRICULTURAL IMPLEMENTS, GRASS SEEDS, &c.

JAMES MOORE, successor of Sinclair & Moore, Light street near Pratt, tenders his thanks to the agricultural community, for the liberal patronage heretofore afforded to the Maryland Agricultural Repository, and respectfully invites the attention of farmers and others, to his stock of articles now on hand, comprising a large assortment of PLOUGHS of the most approved patterns, both wrought and cast shears, and of sizes adapted to all the purposes of agriculture—also Hill side and double mould board ploughs.

Corn cultivators of different kinds, those with five wrought times generally preferred: Harrows of different shapes and sizes.

Corn shellers, the usefulness of which has been fully attested, and the increased sales of the last year, together with the many impressions of their utility, by those who use them, give evidence of their excellence—price \$20. Subject to a discount of 5 per cent for cash payment.—Price from \$15 to \$39. Improved Wheat Fans, of different sizes.

Cylindrical Straw cutters, a superior article for cutting any kind of long forage, 20 inch boxes adapted to horse power, \$75—extra knives per set \$6. 14 inch box adapted to manual power \$45—extra knives \$5 per set. 11 inch box which has some recent improvements \$30—extra knives, \$3 per set. Common dutch straw cutters from \$5 to \$7.50.

Garden and Field Tools, such as spades, shovels, hedge shears, mattocks, grubbing hoes, pruning tools, and hoes in a variety of forms, &c. Cast steel axes, warranted, Wove wire for screens, fans, cellar windows, safes, &c. Cotton Gins made to order—Grain Cradles—Harvest tools in their season.

Machines for sowing clover seed, which distribute the seed with regularity over a space of 12 feet at a time.

Having an Iron Foundry attached to this establishment, extra castings for ploughs of all kinds, Threshing machines, Horse powers, Mill work, window weights, &c. can be furnished or made to order of the best quality and at moderate prices.

FIELD SEEDS.

Orchard grass, Herds grass, Tall meadow oat grass.—Timothy and Clover; also on hand a lot of Ruffle oats.—Buckwheat, Millet, Potato Oats, &c.

Retail sales mostly confined to town acceptances, or to cash for which a discount will be made on implements. March 8th.

500,000 SILKWORM EGGS.

THE subscriber offers for sale 500,000 Silkworm Eggs low to close sales.

JAMES MOORE,

Agricultural Repository, Light, near Pratt st.
March 22.

A BROOD MARE FOR SALE.

A SUBSCRIBER in Virginia writes to us as follows:

"I have a considerable stock of Blood Horses on hand, which would allow me to spare a Brood Mare, by the celebrated Contention. Should any gentleman wish to breed from any of the imported or other horses in the south, it would afford a fine opportunity to purchase her and have her served before taking her to the north. She is young, has brought two colts, and can be accompanied by well authenticated testimonials of pedigree, as her sire is well known, and her dam was once owned by Col. Wm. R. Johnson."

Any person desirous of purchasing a Brood Mare of the above description, can be supplied by addressing a letter to the Editor of the Farmer and Gardener—post paid.

Feb. 16.

4t.

GAMA GRASS SEED.

JUST received, a fresh supply of Gama Grass Seed. This is the grass that bears cutting every 15 days for soiling, and every thirty days for hay, from the middle of May till frost, say till the middle of November, and has yielded at the rate of 64 tons to the acre under peculiarly favorable circumstances, and from an acre of which 30 tons may be calculated upon. The earlier it is sown in the spring the better.

ROBERT SINCLAIR, Jr.

Maryland Agricultural Repository, Light near Pratt street.

Feb 9

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 48.

BALTIMORE, MD. MARCH 29, 1836.

Vol. II

THIS publication is the *successor* of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, MARCH 29, 1836.

TREES AND SHRUBS.

As this is the season for transplanting all kinds of fruit, shade, and ornamental trees, as also shrubs and vines of every description, we would remind our readers of it, and admonish them to plant them as early as possible.

GRAFTING.

This being the period for grafting, it appears to us proper to call the attention of our readers to the subject, and to say that in the middle states in ordinary years, this operation may be safely performed any time between the 20th of March and 10th of April. The present season, however, unless an unexpected and sudden atmospheric change should occur, will retard vegetation so as to make a difference of two weeks, and possibly more.

Grafting can always be performed with the greatest success when the buds of the stocks have swollen so as to be almost ready to burst into leaf.

A STONE SAW MILL.

Messrs. Bunnell & Smith, of Xenia, Green county, Ohio, advertise a newly invented saw mill, which they state is, by its construction, susceptible of the application of any power, either water or steam, to almost any extent in number or length of saws, and by horse power to a very considerable degree, two horses being sufficient for drawing from ten to fifteen saws, under the superintendence of from one to two boys, together with the advantage of being so portable as to be carried from one quarry to another, and that the machine is so simple in the arrangement of its parts that any inexperienced person can manage it.

CLOVER.

The fertilizing character of this grass is so universally acknowledged that it is unnecessary to dwell upon it. But it may be proper to say to

those who may have neglected to sow it upon their wheat or rye, that they may do so with advantage with their oats. This we do not, of course, recommend as a practice to be followed, but as a contingency which should be availed of in preference to neglecting the sowing of clover seed; for we hold it to be utterly impossible to keep up any soil, except at an enormous expense, to a healthful and vigorous tilth, without occasional turning in of clover leys, a crop of buckwheat, or something of the kind to act as a pabulum for such calcareous manures as may be applied; and while we are upon this branch of the subject we would remark, that every farmer who desires to see his land carried to a high state of cultivation should cover a certain portion of his grounds every year with lime, or calcareous earth in some of its various forms.

MOWING MACHINE.

Mr. Enoch Ambler of Root, New York, advertises a mowing machine, whose superiority over all others he insists upon with some considerable tenacity. It is represented as having but one scythe, which is straight, and being sufficiently guarded against stones, by iron teeth, over which it lies. It is propelled by one-horse power.—The machine he warrants to work well and spread the grass as fast as it cuts it.

Twenty nine gentlemen, farmers in and about Root, have given a certificate of their approbation of the above described machine. They have seen it, as they testify, in operation, confidently recommend it as a valuable discovery, and believe that it will prove to be highly useful to the community.

Should there be a strike among mowers next summer, this machine will become as popular as did Purdy by beating that chivalric horse *Henry*, in the great race between him and *Eclipse*.

GRAPE VINES AND CUTTINGS.

No one who has a few feet of ground to spare should be without some of the choicest varieties of the grape; for of a truth there are but few delicacies of the fruit kind, so grateful to the human palate as are fine well ripened luscious grapes.—Those, therefore, who have not already provided themselves with this treat to the females of their families should avail themselves of the present season to do so. The cuttings in three years if

properly planted and attended to, will bear fruit, and the vine of three years old or more, if taken up well and planted with care, will bear a moderate quantity of grapes the *present* season; we speak advisedly, having removed a grape last spring on the 14th of March, which was four years old, and which bore a few bunches of grapes.

In planting a vineyard, a choice of soil and situation is highly important. Of the soil we would remark, that a light, rich, deep loam resting on a limestone, calcareous, or gravelly bottom is best; but if neither of these be attainable, a very good substitute may be found in liming the land or giving it a good dressing of marl.

The situation should be on an elevation inclining to the south or south-west; the ground should have a gradual descent, that the moisture may be drained off. If defended from the north and north-west winds so much the better.

Those who only desire to grow a few vines for their own table need not apprehend any difficulty, be their situation what it may, as the grape will grow in any exposure and soil about the dwelling, and indeed a very few vines will supply the table of any family, and as to exposure and soil, both can be found congenial in almost any location of a mansion, whether in town or country, and, indeed, all the varieties of foreign grapes succeed best when protected by the warmth of town-quarters.

THE MAMMOTH BULL EMPEROR.

We called a few days since, at the place of exhibition in this city, to see this justly celebrated animal. He is now six years old, was raised by the Hon. Charles A. Barnitz, of York, Pa., and is of the improved Durham Short-horn breed.—His body is white with a few bluish spots interspersed through it; both ears blue; his face, very thickly mixed with grayish blue spots. His hide is thin, beautifully tinged with a yellowish cream colored hue, rather thinly covered with a satin-like suit of hair. From the shoulders to the hips he is as straight as though his dimensions had been filled up by a mason's plummet, and the same characteristic trait distinguishes his massy hind-quarters. His weight is 3710 lbs., as ascertained by actual weighing in the scales at York, Pennsylvania, on the 11th of September, 1835, when, it is said, he was not fat. It is supposed

that if fattened thoroughly he might be made weigh 5000 pounds. When we say that he is an animal of great beauty, we make no reservations on account of his size; for, without doubt, he is as symmetrically formed an animal of the cattle kind as we ever beheld, and we doubt much whether a more perfect specimen of the Improved Durham Short-horn can be found any where, either in Europe or America. In point of size he is infinitely 'the superior of the great *Durham Ox*, raised by Mr. Charles Colling of England, which gave almost the first celebrity to the breed; he weighed but 3024 lbs. being less by 686 lbs. than Emperor.

The following measurement of Emperor will impart to the distant reader some idea of this huge mountain of flesh:

He is 5 feet 4 inches high.

He is 9 feet around the girth just under the fore-shoulders.

He is 11 feet around the belly.

He is 11 feet long from the forehead to the rump.

He is 2 feet 6 inches wide across the hips.

His head is 2 feet 4 inches long.

He measures 4 feet *through* the breast.

He measures 9 feet around from the shoulders.

After giving the dimensions of this immense animal we need hardly add, that his great weight renders him inactive, and that he is incapable of walking far. We noticed while examining him, that his ponderous burthen of flesh had considerably enlarged his hoofs, and that one of them had been disshaped from mere excess of weight.

As he stood upon his wagon or car, we thought his comfort would be more consulted if his owners were to provide him with *turf* to stand upon; the plank flooring being entirely too hard for a creature of such magnitude.

Emperor we understand was bought last fall from his then owner and raiser, by his present proprietors for \$400, for the purpose of exhibiting him through the country. He is transported from one place to another in a car, and we hope wherever he may go, that farmers will avail themselves of the opportunity of witnessing one of the best specimens of the Improved Short-horn Durhams to be found in any country. By him they will be enabled to form some idea of the great value their own stock would derive from a cross with a Durham bull.

CULTIVATION OF VEGETABLES.

ENGLISH DWARF BEANS.

The following varieties of this favorite vegetable should be planted as early as possible—viz:

the *English Dwarf*, or *Snaps*, the *Broad Windsor*, the *Early Long Pod*, or *Nonpareil*, *Early Lisbon*, *Early Mazagan*, &c. To state any particular day when they may in safety be planted in the spring, in a climate so variable—so eccentric as ours—would be beyond our power at all times; but at the present season, when instead of snuffing the delightful breezes of spring, charged as they were wont to be in years by-gone, with an air as soft as invigorating, we have now in the last week of March to muffle up as though we were tourists in Kamtchatka, to preserve ourselves from the piercing cold—a cold almost as penetrating as that which usually characterises the depth of winter.

All then under such circumstances that we can do by the way of fixing the *time* of planting, is, to repeat what we have before premised—plant as early as possible—that is as soon as the frost is thoroughly out of the ground.

For *Beans* a strong heavy soil is decidedly best; but you must see that the soil is not too wet when you work it. Your bed should be well manured and dug, raked finely, laid off into drills 3 feet apart, and the beans 4 inches asunder.—Cover them over about an inch deep. When the beans are up about two inches stir the earth around them, and you must hoe between and around them as they may subsequently require working. As these beans are hardy, there is but little danger of their being injured by any frosts which usually occur in the month of April.

If all of the above sorts were planted at the same time, the different degrees of their earliness would ensure you a successive supply of beans for your table. And in order to prolong the period of your indulgence in these delicacies, you should plant them at intervals of a week throughout the month of April. They will be fit for the table in June.

KIDNEY DWARFS OR SNAPS.

Any of the following kinds may be sowed any time from the beginning of April until September, viz:

Early yellow six weeks; early mohawk, speckled purple; early cream colored 6 weeks; early china dwarf red eye; large white kidney; refugee or *thousand to one*; Early yellow, Rob Roy; Red Marrow, or Valentine, white Marrow or Cluster; Red speckled or French, Early Dun colored or quaker; Warrington or Marrow; Dwarf white Cranberry; Dwarf Dutch case knife; early white Flageolet, &c.

Prepare the ground and plant as above directed.

The first variety of beans must be shelled and boiled in plenty of water with a little salt, and some add a few stalks of spear-mint which con-

noiseurs and epicures say, imparts a fine flavor to the bean. They should be served up with melted butter and pepper.

The latter variety when pulled for cooking must have the stalk end first cut off, then turn the point and strip off the strings. They are always best when fresh pulled; but should they have been any length of time gathered, have a vessel of cool water with a small quantity of salt dissolved in it, and as the beans are cleaned and stringed throw them in. Boil them in water with a slight portion of salt in it for 20 minutes, when they will be done sufficiently: dress them with drawn butter and pepper.

In speaking of beans, that accomplished gardener, Mr. McMahon, says, "as early in this month as possible plant a full crop of Windsor beans, and also of any of the other varieties which you esteem; the Mazagan and Lisbon are the earliest; the white blossom bean is very delicious, and boils much greener than any other kind; but the green Genoa bears the heat of our climates better than either of the other kinds, and is therefore most suitable for late crops: the long podded bean is very good and bears well; but the Windsor, Sandwich, token and broad Spanish kinds, on account of their great size and sweetness are more esteemed for blanching than any other. The dwarf cluster bean, is a very great bearer, never grows above a foot or fourteen inches high and may be planted in rows, either in beds or borders, the rows to be single, about two feet asunder, and the beans 6 inches apart."

DIRECTIONS FOR THE

MANAGEMENT OF FLOWER SEEDS,

Sold by Robert Sinclair, Jr., Light, near Pratt street, Baltimore.

As a general principle, says Thorburn, almost every thing that grows, thrives best in a rich soil; there are few exceptions, but they are so trifling, that this rule may be laid down for all practical purposes: therefore make your ground rich; dig it deep, turn it well over, and make it level; then rake it smooth; if it is well dug, it will be perfectly level, therefore the raking is necessary only to make it smooth and fine. In small gardens, where there is not space for picturesque delineations, *neatness* must be the prevailing characteristic. "A variety of forms may be indulged in, provided the figures are graceful and neat, and not in any one place too complicated. An oval is a figure that generally pleases, on account of the continuity of its out line; next, if extensive, a circle. But hearts, diamonds, or triangles seldom please. A simple parallelogram, divided into beds running lengthwise, or the larger segment of an oval, with beds running parallel to its outer margin, will always please." When your ground is ready, mark out a bed according to the number of kinds you have to sow: we will suppose you have forty, a little bed, ten feet six

inches long by two broad will hold them, (when there is plenty of room, of course more can be taken.) Fasten your line on each side; begin at six inches from one end, have a square stick, longer than the width of the bed, with a mark near each end and one for the centre; lay it across the bed, and place the number-stick with the name of a sort on each side exactly in the middle; draw a shallow drill with your fingers; take two sorts, and sprinkle one along the drill on one side of the number-stick, and one on the other; press them gently down, and cover them about a quarter of an inch: then move your square six inches from the drill, put in the number-stick, sprinkle, cover, and proceed till you have filled the bed. You will now have twenty rows, and two kinds in each row. Half a row will contain as many plants as you will want of one kind, that space being sufficient for twenty or thirty dahlia seed, and of the smaller kinds two or three times that number. From the middle of April to the beginning of May, the seed must be sown: in about a month more or less, many of them will be fit to transplant. Take advantage of cloudy and rainy weather for this operation; move the plants carefully with a transplanting trowel, the smaller kinds set in front, the larger in the rear, taking care to arrange them alternately according to their colour and time of flowering: but if the sky be unclouded and the sun bright, give a little water, and it will be safest to cover them with a flower pot, or something else for a few days. Any thing may be transplanted that we know of, except the Poppy and Lupin, and these we believe to be impossible; they must therefore be sown where they are to blow.

The *Convolvulus minor*, with its beautiful azure, open to the morning and closing with advancing day, penetrates deeply, and cannot easily be moved, and it should be done when quite young. Many other flowers, which have long naked roots, should also be moved when young. Sow *Mignonette* near your house, under the windows, anywhere and everywhere, wherever you can constantly enjoy its delightful sweets: it is most fragrant in spring and autumn, and continues till quite cold weather. The *Balsam*, vulgarly called *lady's slipper*, is greatly neglected and undervalued. With good seed, rich soil, and frequent waterings, it will attain a circumference of from ten to fifteen feet; and its clear amber stem, and endless profusion of large and variegated hyacinthine blossoms, render it one of the most elegant of all the annuals. Soak *Cypress Vine* seed, twelve hours, and plant it about the middle of May: when in a mass, with its graceful and feathery foliage, and its transparent and brilliant crimson flowers, it is beautiful. The poor despised *Morning Glory*, when trained to strings six inches apart, along fences and over out-houses, or to poles, presents every morning till the frost destroys it, a scene of splendour unequalled by any other flower. Plant vines and creepers where they are to remain.

By sowing in drills the weeds can be easily kept down, the plants thinned, and the transplanting performed with greater certainty.

Assortments of 100 variety of Annual, Biennial, and Perennial Flower Seeds, for \$5 00
Do 50 do do 2 50

[From the *Southern Agriculturist*.]

CULTIVATION OF THE SWEET POTATO.

JOHN'S ISLAND, Feb. 22, 1836.

SIR—Sweet potatoes constitute so important a branch of our provision crop, that I cheerfully comply with your request, for such information as I might possess as to the mode of cultivating them; and with that view proceed to state some facts which have come within my own observation and experience.

I have frequently heard the opinion expressed by planters, that land may be too rich to produce potatoes; but my own experience has been the reverse. With me, the richer the land, the greater the product. The error, as I consider it, has arisen from gathering the crop on the richest land first, whereas, it should remain for the last. Potatoes in land moderately manured, will arrive at maturity before those produced on very rich land; but the latter, when matured, will be much more abundant. I noticed this difference about 25 years ago. On the 10th of August, I caused part of a row to be dug in land that had been very highly manured by cow-penning. The vines were very luxuriant, and I found the young potatoes very numerous; but few of them were as large as a man's finger. At the same time I tried a row in a weaker spot, where the beds had been trenched, and manured in the trench with compost from pens, and the potatoes laid on the surface. Here the potatoes were large, but yielded only about one bushel to the row. Early in the following November, the remainder of the row that had been first tried in August, was dug in my presence, when it yielded four stick baskets, heaped up, of very large potatoes, and one of smaller ones. On making a fair calculation, based on the produce of the row thus measured, the produce of the whole acre was estimated at 240 bushels. Many of these potatoes were too large for the depth of mellow earth, and their tops, in consequence, projected out of the beds. They were of the kind having red skins, with yellow hearts, and the land on which they grew was prepared and attended with the hoe in the usual way.

The following memorandum, made on the 6th December, 1823, are extracted from my plantation book.

"In the month of March I prepared 4½ acres of old field, flat, heavy, loamy land, for sweet potatoes, in the following manner. The beds were tracked off five feet apart, with a bull-tongue plough, and listed with the hoe. The space between, was then broken up with the eagle-plough. About three-quarters of an acre of the ground had been recently manured by sheep and cattle penned on it, and was supposed to be sufficiently rich. Two and three-quarters of an acre were manured with a compost of broom-grass, dry marsh and animal manure, trodden together in my winter pens; and the remaining acre, with dry pine trash simply—both of these kinds of manure were deposited in the proportion of one cart load to each row, and were afterwards spread over the listing. I then had the listing trenched down to the general level of the land, and whole seed-potatoes laid lengthwise in the trench, about six inches apart. Over these, successive layers of earth were thrown by the dog-plough, from each side of the listing alternately, until the alleys

were entirely furrowed up. The clods of earth were then broken, and the beds finished off with the hoe, the seeds being buried, by this process, five or six inches deep.

On the 6th of December, a month after the vines had been killed by frost, I gathered in the potatoes from one acre of the above described land, (the rest having been previously consumed as provisions for my people and stock,)

When ½ an acre of leather coats yielded	185 bushels.
¼ acre of yams,	72 "
¼ acre of red skinned with yellow hearts,	138 "
Total,	395 "

From this it appeared that the yellow hearts yielded at the rate of 554 bushels per acre; the yams 288 bushels, and the leather coats 370 bushels. But such a number of leather coats, of the largest size, were found rotten, when turned out of the earth, as to induce the belief that the product from them was the greatest. The land on which they grew was manured with the compost mentioned above. The yellow hearts were manured with pine trash only. The yams grew in cow-penned land. None of the latter, and but few of the former were found rotten."

I have found it advantageous to plant potatoes in trenches, made on the listing, as above described, covering the seed to about the depth of three inches at first, and hauling up, at each working, as much earth as is necessary to smother the grass while young, thus adding gradually to the size and height of the bed. Care should be taken, however, to keep the shoots supported in an erect position, by the earth thus drawn up, until the bed has attained the usual size, when they may be left to run at large. If managed in this way, the mother potato, when dug, will be found at the depth of nine or ten inches, not enlarged, (as is the case when planted shallow), and its progeny produced between itself and the surface of the bed, on offsets at every point of the long stem. I have counted upwards of twenty potatoes attached to a single stem. The potatoes cultivated in this way are assimilated to early slips, produced from vines, and may be kept sound for nearly as long a time.

The product from large seed is earlier, and of a greater size than from small seed. In planting the yellow hearts, if cut, only the stem ends should be used, as the other part very seldom sprouts. I prefer to plant all sweet potatoes whole, but in that case, they must be managed as above. If planted shallow in a large bed, the mother potato will grow large, and produce an abundance of early vines, but few new potatoes.

With respect to slips, I have found the following plan best. Cut the earliest vines when between eight and twelve inches long, and lay the cuttings two inches apart, in deep chops made across the beds about one foot apart, placing three or four cuttings in each chop, and covering them up for three-fourths of their lengths. The beds should be shallow at first, and afterwards enlarged by the successive haulings of earth necessary to destroy the grass.

Vines cut off close to the main stem, have ma-

ny short joints, and will produce early and abundantly. When they have been allowed to grow long before being severed from the stem, it will not do to cut them into pieces for planting. They must then be planted in the usual way, that is, by being laid lengthwise along the top of the beds, and covered at intervals with small hills of earth.*

In comparing the different kinds of potatoes, I have come to the following results:—

The leather coats are the earliest in maturing, and produce abundantly, but do not keep well.

The red skinned with white heart, are next early; they do not produce as well as the former, but keep better, and are more hardy, producing sooner, and resisting cold in the ground better.

The red skinned with yellow hearts mature almost as early as the red with white hearts, and keep better; they are equally productive with the leather coats, perhaps more so.

The yams keep best of all the kinds I have tried; and produce well, but not so abundantly as the leather coats and yellow hearts.

The Spanish are finely tasted, but with me a scanty bearer. I seldom plant them.

Much of what I have said, though, perhaps superfluous to many planters, may be useful to others. If you suppose that the whole, or any part of this communication, will promote the laudable objects of your periodical, you are at liberty to make use of it for that purpose.

I remain, with respect, your ob't, serv't,

KINSEY BURDEN.

* In gathering the crop of slip potatoes, after cutting off the vine, with the hoe, throw off one furrow from each side of the bed, with the dagon, eagle, or shovel-plough, instead of the hoe; and much of the labor will be saved: but care should be taken not to permit the plough to pass into any spots of land infested with nut or wire grass, or it will spread those pests of the field.

Much time and labor may also be saved by carting, instead of carrying on the head to the cellar. The bottom of the carts should be covered with vines, and the whole load must slide out together.

Directions for the cultivation of the Tuberose.—About the end of April or the beginning of May, plant the Tuberose in deep light soil, made rich by mixing well a good supply of manure two years old, with the earth, or by turning down some grass sod under the foot. Black earth from the woods, produced by decayed leaves, answers well. Plant the bulbs, after taking off the offsets, and cover the crown about an inch and a half. When they shoot up their stems, give them neat green painted rods for their support. The Tuberose has been long and highly esteemed for its powerfully odoriferous qualities. The flowers are of the purest white, and the stem grows from three to five feet high.

Take up the root in the early part of November, let it lie a few days to dry, then put it away in a situation free from damp, and where it will not freeze.

Mr. George C. Barrett, the patriotic publisher of the New England Farmer, died on Sunday, the 20th inst.

PROFESSOR DUCATEL'S REPORT.

(Continued.)

SEC. IV. On the Discovery of Green Sand or "Jersey Marl" in Maryland.

It has already been stated that *green sand*, or, as it is sometimes called, "Jersey marl," from the circumstance of its having been first applied as marl in New Jersey, occurs in Maryland. The reign of country, comprising the geological formation of which this sand forms a member, embraces, so far as opportunities have been had of tracing it, the lower portions of Cecil county, together with nearly the whole of Kent county, on the Eastern Shore, and, crossing the Chesapeake bay, makes its appearance along the Severn, on the Western Shore. The mineralogical characters of the formation designated as the *Ferruginous sand formation*, are very variable, consisting of local and circumscribed deposits of clay, sand, and gravel, most of them highly ferruginous, and varying in color from deep red, yellow, gray and green, to black and bluish black. Among these deposits two of them, for present purposes, merit especial attention—that already referred to as the *green sand*, and another which may be designated as a *micaceous black sand*.

The green sand of Maryland, when pure, may be described as a friable aggregate, with particles of a green color of various shades, yielding readily under the pressure of a knife blade—leaving a distinct and permanent green trace upon paper—forming a paste with water, to which they impart their color, and communicate a peculiar odor, and are essentially composed of silica, alumine, potash, and oxide of iron, the quantity of potash varying from three to ten per cent.

This green sand form occasionally extensive beds unmixed with any other mineral substance, but containing fossils; or is mixed in various proportions with the ordinary sands and clays belonging to the formation in which it occurs, and is likewise disseminated through the clays and marls of a more recent period. Its analogue in Jersey has been long and largely employed as an agricultural resource, the fertilizing quality which it eminently possesses being doubtless due to the notable proportion of potash that enters into its composition. That it can be employed in Maryland with equal benefits, there is no room to doubt; so that it becomes a matter of importance to establish its relative value, compared with some known article whose value is acknowledged by all agriculturists, and, when unspent, owe their properties in a great measure, if not solely, to the presence of the same ingredient—namely, potash.

The quantity of saline ingredients contained in ashes, of which carbonate of potash is the chief, varies considerably, according to the species of wood or plant that has been burnt, and from other causes; but generally, that obtained by the farmer in his household, if unleached, may be said to contain scarcely more than ten per cent. of carbonate of potash. If leached for domestic uses, the quantity may have been reduced to three per cent. On the other hand, the ashes obtained from the soap boilers contain no potash at all, being nothing more than a very impure carbonate of lime.

If it be admitted that unspent ashes owe their fertilizing quality to the presence of carbonate of potash, there is reason to believe that the green sand will prove equally serviceable in proportion to the quantity of potash which it may contain, and its value may be estimated by ascertaining the relative proportion of this ingredient compared with that contained in ashes. With ashes obtained from the soap-boilers it is not comparable, these being, as already stated, nothing more than an impure carbonate of lime. Now, although it is not seen by what direct agency the potash comes to be separated from the other ingredients with which it is associated, there is reason to believe that it is eliminated, either by a natural decomposition, as in some well known minerals supposed to be peculiarly liable to disintegration from its presence, or by a more obscure, but at the same time more effective, process carried on in the organic laboratory of the living plant. If the potash be conceived to have been liberated, as is possible, before its absorption by the plant, it becomes doubtless immediately carbonated, passing thus into the same chemical condition as it exists in ashes, and, in this case, a pure green sand will afford more carbonate of potash than any of the ordinary ashes. On the supposition, then, that these owe their fertilizing quality to this salt, it may be concluded that pure green sand, containing, as it very generally does, ten per cent. of potash, is at least equal in value to unleached ashes as a manure.

The intelligent editor of the Farmers' Register, appears inclined to ascribe the fertilizing properties of green sand, or 'Jersey Marl,' to the presence of gypsum, or sulphate of lime: but the material described above contains none; nor are any of its constituents convertible into this substance. Not the slightest trace of sulphate of lime was discovered in the heaps of marl extracted from the pits of New Jersey, and examined in a number of localities; and Professor Rogers states that this mineral was seen by him only in one locality, at which the crystals were so minute and few in number as to require the use of a microscope to be discerned. The error appears to arise from confounding the pure green sand with another arenaceous deposit of the same formation, that will be more particularly described presently, enclosing particles of green sand, but characterized by the presence of sulphuret of iron, and in which crystals of sulphate of lime are not unfrequently found.

The experience of thirty years has demonstrated to the farmers of New Jersey, that green sand is both an efficient and permanent manure. Its discovery in Maryland cannot fail to prove equally serviceable to the agricultural interest of this State; but in order to derive full benefit from it, experiments must be made, not to establish its efficacy, for that cannot be doubted, but to ascertain the extent to which it may be employed, according to the nature and condition of the soil. In the absence of positive results, the safest course is probably to use it in moderate quantity; though nothing is apprehended in applying it to any kind of soil, in the proportion of from five to twenty loads of twenty bushels to the acre, as in New Jersey, where it is delivered at the pits for thirty-seven and a half cents a load, and is not

unfrequently hauled to the distance of twenty miles.

The most interesting deposit of green sand hitherto examined in Maryland, occurs on the farm of Mr. Charles Thomas, at the head of the Sassafras, in Kent county. It extends along the banks of the river, in a most convenient situation for transportation by water, and although covered by a thick stratum of ferruginous sand, it is quite accessible in the ravines that intersect the banks, appearing also at the foot of the hills that spur into the river. In one spot the sand is filled with fragments of fossil shells, (*Terebratulæ*), by which its value as marl will be found doubtless greatly enhanced. There is reason to believe that, in the hands of its intelligent proprietor, this deposit will not remain neglected; its contents have, indeed, been used already on a small scale, with the promise of the best effects. A similar deposit occurs on the opposite side of the river, in Cecil county.

It was thought advisable to obtain specimens of the green sand from the locality just referred to, for distribution among the farmers of Kent county; directing, at the same time, their attention to those spots where it was found to make its appearance, with the most favorable indications of its occurrence in a sufficiently pure state. This measure, with the assistance of some of the most enterprising and intelligent inhabitants of the county, has been attended with some advantages, by instituting researches among those interested in the discovery, and thus preparing the way for the more thorough examination which it is proposed to make during the ensuing season of this interesting portion of the state.

Another deposit, contemporaneous, it is believed, with the ferruginous sand formation, has been designated as a *micaceous black sand*. Its general characters are the following:—Viewed in a mass, it presents the appearance of a bank of bluish black clay, somewhat plastic, and leaving a glossy appearance under the spade; but when exposed to the air it crumbles into a grayish black sand, with minute and numerous spangles of mica, and enclosing particles of green sand. It is readily diffusible in water, in which it remains suspended for some time, imparting to it a bluish black color; and emitting a decided odour of gunpowder. When spread out, and after exposure to the atmosphere for some days, it here and there exhibits an efflorescence of the sulphate of iron, arising from the decomposition of nodules of *sulphuret of iron*, which it very generally contains. Crystals and spiculæ of sulphate of lime are also not unfrequently seen, or may be detected by a closer examination. In most locations, impressions only of fossil shells are observed, but in others the fossils themselves occur, though rarely, in a good state of preservation. The best preserved fossil obtained from a deposit of this sand, not yet visited, but of which samples were forwarded, is the *ostrea falcata*. In one locality, at the head of Churn creek, Kent county, the bed having been penetrated into for several feet, was found to contain numerous fossils, consisting of a species of *Turritella*, the *Cucullea vulgaris* of Dr. Morton, claws of crustacea, teeth of a saurian animal, fish bones, wood perforated by marine insects, &c. At another spot on the bay side of the same county, at Fairlee, a bed of this sand

presents itself under interesting circumstances; it forms, as it were, a wave, extending about one hundred yards along the bank, contains nodules of pyrites, particles of green sand and spiculæ of selenite, and is overlaid by a deposit of gravel enclosing large boulders of primary rocks, mostly hornblend and quartz rock. But a more particular geological account of this deposit is deferred for another occasion.

A closer examination of this micaceous black sand shows it to be constituted principally of a fine siliceous sand, the grains of which are nearly transparent or colorless, small spangles of silvery mica uniformly disseminated, grains of green sand, and finely divided earthy matter—its black color appears to be due to the presence of carbonaceous matter. Fragments of very thin shells, and what would seem to be the tendrils of roots matted together, are also discernible. Sulphates of iron and alum exist already formed in the sand, and may be dissolved out of it by water, which likewise takes up a vegetable extractive matter. Treated with alcohol, a small portion of a resinous substance is separated that may be precipitated by water. A more satisfactory opinion of the true nature of this sand will, however, be formed by a reference to the following elaborate analysis of it, as furnished at the request of the undersigned by Mr. P. T. Tyson.

Analysis of the micaceous black sand, associated with the green sand, in Maryland.

Silica,	65.50
Alumina,	7.75
Protoxide of iron,	11.70
Lime,	1.40
Potassa,	.20
Carbonic acid,	1.10
Sulphuric acid,	2.00
Water and volatile matter,	8.00
Vegetable extractive matter,	a trace
Resinous matter,	a trace
	97.65

The view thus afforded of the chemical composition of the material now under examination, leads to the belief that when applied to the soil, such an arrangement of its constituents might be produced as, by the decomposition of the sulphates of iron and alum, and the presence of calcareous matter in the shells which it contains, would give rise to the formation of a sufficient quantity of sulphate of lime, or gypsum, to account for the good effects that have resulted in several instances from its application as a manure. For, supposing its composition to be uniform, the quantity of sulphate of lime that would be formed might be such that thirty-five bushels would contain about the same quantity as one bushel of *ground plaster of paris*, its fertilizing property enhanced moreover by the presence of oxide of iron, potash, and vegetable matter, and as a bushel of plaster of paris is the usual quantity applied, it follows that thirty-five bushels of the *black sand*, being equivalent to one bushel of gypsum, might be expected to produce analogous results. It has at all events been used advantageously as a top-dressing on grass crops, and it has proved injurious when employed largely upon corn lands; so that enough of it is already known, to constitute it an object of interest for those farmers who have it within their reach. In the hope of stimulating

them to its employment, *experimentally*, the following localities, where this sand has been observed, or whence specimens have been obtained, including those already named, are now indicated.

The *micaceous black sand* has been observed in place—on the Eastern Shore, at the head of Chura creek, on the farm of Mr. R. Jones, who has used it successfully as a top dressing upon clover, and from whom the information was also obtained, that it had proved destructive to the first crop of corn after a copious application; and at Fairlee, on the farm of Richard Frisby, esq. Specimens have likewise been forwarded from other parts of Kent county, and of Cecil county; but generally accompanied by other parcels, and so indefinitely marked that it might not be advisable to refer to them at present. It may be stated, however, that the banks of the Bohemia river, in Cecil county, will probably afford an abundant supply of this material; to which the attention of landholders in that section of country, as well as to the occurrence of the green sand, is earnestly solicited. On the Western Shore, the micaceous black sand has been discovered at the head of Severn river, in Anne Arundel county, and on the borders of Round bay. In Prince George's county, it was found in the vicinity of Nottingham, on the estate of R. W. Bowie, esq. occurring in the deep ravines that intersect the country bordering on the Mattaponi. It contains impressions of shells, and is occasionally covered by a layer of indurated sand with similar impressions. The deposit mentioned in a preceding report, as occurring at Oxen creek, on the Potomac side of Prince George's county, and then designated as *copperas earth*, is now believed to be analogous to those now under consideration; and the same observation applies to the other deposits of this earth that were at the same time indicated as occurring in Charles county. The *micaceous black sand* has also been seen in St. Mary's county, and will be more particularly referred to in the section embracing a geological account of this county.

On the plantation of Col. Wm. D. Merrick, in Charles county, there occurs a black micaceous sand precisely similar, in its mineralogical characters, to that described above. This deposit makes its appearance in several places on the head branches of Pope creek. It contains fossil bones—the vertebræ, and other portions of animals, belonging, it is believed, to the *saurian* family; and in one locality (Mrs. Edelen's plantation) forms a stratum of from eight to ten feet thick, covering a bed of blue shell-marl. At a greater elevation, in the same vicinity, there occurs a bluish-green micaceous sand, with impressions of shells, which seems to occupy a position superincumbent upon the micaceous black-sand; and a similar sand has been observed underlying the fossiliferous deposits of St. Mary's county. The geological relation of these arenaceous deposits with the secondary and tertiary formations of the Atlantic coast, has certainly not, as yet, been satisfactorily determined. Whenever such a determination shall be attempted, it will be found necessary, most probably, to attend to their mineralogical characters, as paramount in importance with the nature of the fossils contained in them, upon which their classification into geological

groups has hitherto, it is thought, been too exclusively based.

[From the Maine Farmer.]

SEA COAL AS A MANURE—GROWING POTATOES, &c.

MR. HOLMES:—Although I am no farmer I feel considerable interest in the improvements of the day. I am sensible that good manure is an essential ingredient in producing vegetation. I have seen many suggestions on making compost manure, in which the object seems to be to obtain the largest quantity without regard to the quality. I have noticed accounts of premiums awarded for making large quantities of compost manure, when from the ingredients used, I was satisfied the quality was indifferent, or of little value. I now wish to enquire through your paper, of the truth of a statement I saw in the Medical and Agricultural Register for February, 1806.—The article is entitled "some Experiments on Sea Coal as a Manure by Thomas Ewell." In page 26, towards the close of the article he says, "Probably the discoveries which have been made, are not as generally known as they should be. It may be owing to this cause—for example, that an ounce of sulphuric acid is not added to every load of manure—which has long since been found in England to render it doubly valuable."

I have no means of knowing what authority Mr. Ewell had for this statement respecting sulphuric acid. I should like to know more about it. If one ounce can produce such an effect in a load of manure, what would be the effect of a larger quantity, &c. I am a friend to experiments properly made. Experience is a good schoolmaster. I have noticed some communications speaking lightly of Barnum's method of raising potatoes, &c. I think highly of Barnum's communication, and esteem it a valuable document. I have fully satisfied myself by experiment.

The last season I raised at the rate of fifteen hundred and ten bushels to the acre on Barnum's principle. I have made a number of experiments on vegetation—perhaps they are not worth mentioning. I will however mention some.

From the proceeds of one seed of a potatoe ball the second year, I now have 24 pounds of handsome potatoes. I have eight different kinds of potatoes—those produced from the seed are different from any others in my possession. The produce of one eye of a potatoe last season was 8 pounds of good sized potatoes. By planting the eyes of large potatoes in rich ground, I raise a large size—I had many that weighed one and a half pound, and one weighed two pounds and ten ounces—(a Quoddy blue)—3 eyes of a potatoe is as much seed as I want in a hill. The same observations respecting manuring and seeding will apply to all other vegetables. But in selecting manure I would prefer one pound of good strong manure to ten pounds of the compost manure which I have seen described.

Respectfully,

HEZEKIAH PRINCE.

Thomaston, Feb. 16, 1835.

REMARKS.—The experiments of Mr. Prince are very interesting, and we are extremely hap-

py to hear of his success in his labors. The great increase from a single seed of a potatoe ball in so short a time, gives one a pleasing idea of the creative powers, if we may be allowed the expression, of the cultivation of the soil. By submitting the seed to the earth and regulating the process, he is enabled to produce results which instruct, delight and profit. His recommendation in regard to manuring and seeding are worthy of attention. In regard to the Sea Coal, we apprehend that very few, if any, in Maine, have ever used it as a manure, and are therefore unable to answer from experience his queries respecting it.—Ed.

THE COTTON PICKER.

The experiment to be made of Mr. Emmons' invention should be forwarded by every Cotton planter in the State. If this experiment realizes the sanguine expectation of the inventor, and the warm wishes of those who feel for the interest of the South, the benefits that will result will be incalculable; if it fails, no one will lose but the inventor. But according to the description we have had of the machine, it will accomplish its object. In this case will not the cotton growing States be immensely benefitted? Certainly they will; because if this machine can pick three-fourths or even one half of the crop, it will save to the planter the manual labor of many of his hands, who can be profitably employed in other pursuits on the plantation. It would enable the planter to plant more corn, and to raise more hogs. It would enable the planter to improve his land by manure. We must bear in mind that as long as Cotton will bear a great price, the culture of corn and small grain will be somewhat neglected. By this neglect, planters are frequently in want of provisions during the summer, which they are obliged to purchase at high prices, and which reduce considerably the profits they make on their cotton. If the experiment with the Cotton Picker succeeds, the planters will be enabled to plant more land in corn and small grain, at least a sufficient quantity to produce their yearly wants. It is then to the interest of the cotton planters to forward the experiment of the Cotton Picker. Besides the advantages just enumerated, we must add another, no less important and desirable. It is that with the Cotton Picker, a large quantity of the cotton can be picked before the rainy season settles in. We all know that the Cotton brought to market before the months of December and January, and after the months of January and February, is of a better quality than when picked in December and January.—As the picking with the machine of Mr. Emmons would be most expeditious, all the cotton opened before the rainy season could be picked and sent to market. We beg leave to call the attention of our planters to the subject of these remarks; and we doubt not that they will agree with us in the importance to the South, of the machine invented by Mr. Emmons.

Georgia Constitutionalist.

[From the Southern Agriculturist.]

HOOKS IN HORSES.

Sir:—Although the best writers on the veterinary art do not recognize such a disease in the

horse, your subscriber from Appling, in Georgia, and Commodore Porter from Constantinople, each relates the almost instantaneous relief afforded to their sick horses, by the very common operation of cutting off part of the third eyelid; the one calling it, according to the Asiatic nomenclature, *bone eye*, the other, to the vernacular, *hooks*.

These gentlemen, like many other persons, were deceived, and made to mistake the effect of cold, or some other inflammatory state of the patient for a disease of itself—nothing is more common. I myself, recollect five cases of tetanus which occurred in the summer of 1820, not one of which but would have been called a case of hooks by the advocates of that doctrine. The first was that of a gelding in my own yard, attended by the veterinary surgeon, Dr. Carver.—A negro who was in the habit of cutting off the hooks, was anxious to perform the operation. I did not consent; the horse died of violent spasms.

The second was that of a stallion, belonging to Dr. Joseph Glover. Dr. Carver attended it, and performed the operation for the hooks—the patient was cured.

The third was that of a gelding, the property of Col. Bryan. Dr. Carver attended this last case, and performed the operation; the patient died.

The fourth was that of a small mare, opposite to my residence; the operation for the hooks was performed in a very early stage of the disorder; this case terminated fatally.

The fifth was that of a stallion of value, the property of the late Maj. Manigault, whose tetanus was produced by the puncture of a nail in the foot; it was treated by an eminent surgeon, who exhibited opium in large doses, and saved the life of the horse. I saw the case, and assert that no hooks-doctor would have left this horse's eyes untouched. Thus out of three cases in which the operation was performed—one was saved—and out of the two where no operation, one was also saved.

For better information on this subject, I quote from the *Preliminary Treatise to the Library of Useful Knowledge*, published in London, under the superintendence of Lord Brougham and others, the most scientific persons in Great Britain. The Treatise is on the objects, advantages, and pleasures of Science, and attributed to the pen of Lord Brougham.

After having described the eye of the bird, the author says, at (p. 30) "A third eyelid of the same kind is found in the horse, and called the *haw*; it is moistened with a pulpy substance, (or mucilage) to take hold of the dust on the eyeball, and wipe it clean off, so that the eye is hardly ever seen with any thing upon it, though greatly exposed from its size and posture. The swift motion of the haw is given to it by a grisly elastic substance placed between the eyeball and the socket, and striking obliquely, so as to drive out the haw with great velocity over the eye, and let it come back as quickly. Ignorant persons when this haw is inflamed from cold and swells, so as to appear, which it never does in a healthy state, often mistake it for an imperfection, and cut it off; so nearly does ignorance produce the same mischief as cruelty! They might, as well cut off the pupil of the eye, taking it for a black spot."

I should be glad if any thing I could say through the medium of your useful work, could prevent in any instance, those two very common, very cruel, and unnecessary operations on the horse—I mean cutting for the *hooks* and burning out the *lampus*.

JAMES FERGUSON.

Charleston Nov. 1835.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,.....	bushel.		
CATTLE, on the hoof,.....	100lbs.	8 00	8 75
CORN, yellow,.....	bushel.	73	74
White,.....	"	68	69
COTTON, Virginia,.....	pound.		
North Carolina,.....	"		
Upland,.....	"	18	18½
FEATHERS,.....	pound.	45	
FLAXSEED,.....	bushel.		1 37
FLOUR&MEAL—Best wh. wh't fam. barrel.		7 75	8 25
Do. do. baker's,.....	"	7 50	8 00
Do. do. Superfine,.....	"	6 87	7 12
SuperHow. st. in good de'd	"	6 87	
" wagon price,.....	"	6 75	
City Mills, extra,.....	"		7 00
Do.	"	6 87	
Susquehanna,.....	"		
Rye,.....	"		
Kiln-dried Meal, in hhds. hhd.		19 50	
do. in bbls. bbl.		4 50	
GRASS SEEDS, red Clover,.....	bushel.		5 25
Timothy (herds of the north)	"		
Orchard,.....	"	none	
Tall meadow Oat,.....	"		
Herds, or red top,.....	"		
HAY, in bulk,.....	ton.	18 00	20 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	8
Hogs, on the hoof,.....	100lb.	9 00	9 25
Slaughtered,.....	"		
Hops—first sort,.....	pound.	18	
second,.....	"	16	
refuse,.....	"	14	
LIME,.....	bushel.	33	35
MUSTARD SEED, Domestic,.....	"		
OATS,.....	"	45	47
PEAS, red eye,.....	bushel.		
Black eye,.....	"		
Lady,.....	"		
PLASTER PARIS, in the stone,.....	ton.		5 50
Ground,.....	barrel.	1 50	
PALMA CHRISTA BEAN,.....	bushel.		
RAGS,.....	pound.		
RYE,.....	bushel.	90	92
Susquehanna,.....	"	92	
TOBACCO, crop, common,.....	100 lbs	5 00	5 50
" brown and red,.....	"	5 00	7 00
" fine red,.....	"		9 00
" wrappery, suitable	"		
for segars,.....	"	5 00	10 00
" yellow and red,.....	"	6 00	8 00
" good yellow,.....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality,.....	"	4 75	5 00
" ground leaf,.....	"	5 00	8 00
Virginia,.....	"	7 00	14 00
Rappahannock,.....	"		
Kentucky,.....	"	8 00	14 00
WHEAT, white,.....	bushel.	1 50	1 60
Red,.....	"	1 40	1 48
WHISKEY, 1st pf. in bbls.	gallon.	37	37½
" in hhds.	"	36	
" wagon price,.....	"	33	33½
WAGON FREIGHTS, to Pittsburgh, 100 lbs		2 75	
To Wheeling,.....	"	3 00	
WOOL, Prime & Saxon Fleeces, ...	pound.	55 to 68	30 32
Full Merino,.....	"	48 55	28 30
Three fourths Merino,.....	"	45 48	26 28
One half do.	"	40 45	24 26
Common & one fourth Meri.	"	36 40	22 24
Pulled,.....	"	38 40	23 24

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,.....	par	
Branch at Baltimore,.....	do	
Other Branches,.....	do	
MARYLAND.		
Banks in Baltimore,.....	par	
Hagerstown,.....	½a	
Frederick,.....	do	
Westminster,.....	do	
Farmers' Bank of Mary'd, do	do	
Do. payable at Easton,.....	do	
Salisbury,.....	5 per ct. dis.	
Cumberland,.....	¾a	
Millington,.....	do	
DISTRICT.		
Washington,.....	do	
Georgetown, } Banks, ½.		
Alexandria, }		
PENNSYLVANIA.		
Philadelphia,.....	¾a	
Chambersburg,.....	¾a	
Gettysburg,.....	do	
Pittsburg,.....	1½a2	
York,.....	¾a	
Other Pennsylvania Bks. 1½a2		
Delaware [under \$5].....	¾a	
Do. [over 5].....	1½a2	
Michigan Banks,.....	5a	
Canadian do.....	5a	
VIRGINIA.		
Farmers Bank of Virginia 1½a2		
Bank of Virginia,.....	do	
Branch at Fredericksburg, do		
Petersburg,.....	do	
Norfolk,.....	do	
Winchester,.....	do	
Lynchburg,.....	do	
Danville,.....	do	
Bank of the Valley,.....	do	
Branch at Romney,.....	¾	
Do. Charlestown,.....	do	
Do. Leesburg,.....	do	
Wheeling Banks,.....	1½a2	
Ohio Banks, generally 2½a3		
New Jersey Banks gen. 1½a2		
New York City,.....	¾a	
New York State,.....	2½a3	
Massachusetts,.....	2a2½	
Connecticut,.....	2a2½	
New Hampshire,.....	2a2½	
Maine,.....	2a2½	
Rhode Island,.....	2a2½	
North Carolina,.....	2½a3	
South Carolina,.....	2½a3	
Georgia,.....	3a3½	
New Orleans,.....	4	

BALTIMORE PROVISION MARKET.

	PER.	FROM	TO
APPLES,.....	barrel.		
BACON, hams, new, Balt. cured....	pound.	15	17
Shoulders,.....	"	12	
Middlings,.....	"	13	14
Assorted, country,.....	"		13½
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,.....	"	20	22
CIDER,.....	barrel.		
CALVES, three to six weeks old....	each.	4 50	6 00
Cows, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 68	1 75
CHOP RYE,.....	"		1 87
EGGS,.....	dozen.		12
FISH, Shad, No. 1, Susquehanna, barrel.			
No. 2,.....	"	3 75	4 00
Herrings, salted, No. 1,.....	"		
Mackerel, No. 2, 8 25a 8 50; No. 3	"	6 25	6 50
Cod, salted,.....	cwt.	3 00	3 25
LARD,.....	pound.	14	

GARDEN SEED.

THE subscriber has just received his general supply of fresh Garden Seeds from the Messrs. Landreth's of Philadelphia—those for retailing bearing their label and warranted. The Messrs. Landreth's grow the most of the seeds they vend, and theirs is the oldest and probably the most extensive establishment in this country, and their seeds have no rival as to quality. Orders from country dealers will be supplied at short notice. Catalogues furnished gratis.

JONATHAN S. EASTMAN.

March 29

ROW

IMPROVED DURHAM SHORT-HORN CATTLE.

MR. POWEL'S entire stock of high bred Improved Durham Short Horns, imported or bred by him, will be sold at auction on SATURDAY the 23d of April next, at nine o'clock, A. M. at Powelton, on the Schuylkill opposite to Philadelphia.

Among them are—Ten young Bulls and nine Heifers, principally derived from animals, selected by Mr. Powel in England, in 1831. But one sale having been made for the last two years, the cattle having been reserved for the present sale. mh 29 4t* WM. HUGHES.

GAMA GRASS ROOTS.

5000 Gama Grass roots will be received, and for sale about the 20th of March. By obtaining roots of this valuable grass, farmers will gain the advantage of two years over seed plantation.

March 1

ROBT. SINCLAIR.

WRITING!!

LADIES and Gentlemen residing in the country, and who may be desirous of improving their hand writing in a short time, are informed that on their visiting Baltimore, if they will call at Mr. Needham's WRITING ACADEMY, No. 146, Market street, between the Museum and St. Paul's street, they can have their writing changed from an awkward, cramped and illegible scrawl, to a beautiful, expeditious and uniform mercantile or epistolary hand in the short space of a few hours for the trifling sum of five dollars. Mr. N. promises to do more in the short time above specified towards eradicating vicious habits than by the ordinary method can be done in twelve years, or forfeit the sum of \$5. The following is a testimonial from several of his pupils in Baltimore:

We the undersigned Pupils of Mr. NEEDHAM, (Merchants and Residents of Baltimore) take this method of publicly expressing our perfect satisfaction of the improvement already made in our Writing, and pronounce him to be equal, if not superior in talents as a Teacher of Penmanship to any one with whom we are acquainted:

Messrs.—James M. Riley—Charles Kettlewell. Jr.—Edward Lea—Joseph Price—George Thompson—Francis Fairbairn—James Somervell—R. S. Harlan—E. Cook, Jr.—John Thomas Wood—James Lord—Thomas R. Brice—William Cooper—Jacob Burnett—Edward Bolton—George Russell.—Misses—Mary Ann Power—Margaret Ross—Georgiana Tilghman—and Mrs. Elizabeth M. Stetson. March 29

A DURHAM BULL FOR SALE.

THE editor of the Farmer & Gardener has for sale the beautiful Improved Durham short-horn bull BOS, deliverable in Baltimore, as soon as the navigation between this and the Hudson river is free of ice. He is of good size, was 4 years old last August; his pedigree which will be well authenticated, is as follows:

"His sire Wye Champion; his dam Brinda. Wye Champion was bred by Governor Lloyd, at his Wye-house farm, Md. His sire Champion, his dam Shepherdess. Champion and Shepherdess were imported from England, by Mr. Skinner, former editor of the American Farmer, and by him sold to Gov. Lloyd. They were considered so great an acquisition to the country, that Congress remitted the duties on them; and their pedigree are recorded on the last page of the Memoirs of the Pennsylvania Agricultural Society. Gov. Lloyd after keeping them several years sold them to J. H. Powel, Esq. They were bred by Mr. Champion, a celebrated breeder in England. Champion was by Warrior, dam by Mr. Coate's Palm Flower, g. d. by Driffield—g. g. gd. by Charge's bull of Newton. Shepherdess was got by Magnet, dam by Prince; g. d. by the Duke of Leeds' bull Magnet, who was got by Warrior, dam Magdeline. Warrior was got by R. Colling's Wellington. Wellington by Comet, dam, Wildair. See proceedings of Agricultural Society of Maryland, respecting them in 4th volume American Farmer p. 114.

Brinda was bred by Mr. James Cox, of Pennsylvania. Her sire was Chester, dam, Corinna. Corinna was got by Bishop, dam, Cora. Chester got by Blythe. Blythe the out of Champion and Shepherdess. Flora was imported at the same time with Champion and Shepherdess—Blythe the last season Mr. Cox had him, went to 95 cows at \$5 each, and sold at the end of the season for \$500."

His price is \$225.

All letters upon the subject must be post paid. march 1

CONTENTS OF THIS NUMBER.

Notices—as to the time of transplanting and grafting trees—of a stone saw mill—value of clover as a fertilizer—of a mowing machine—advice to plant grape vines and cuttings—description and measurement of the mammoth bull Emperor—cultivation of beans—directions for the management of Flower Seeds—communication on the culture of the Sweet Potato—directions for cultivating the tuberose—death of Geo. C. Barrett—continuation of Professor Ducatel's report—sea coal as a manure, and the mode of growing potatoes—account of the cotton picker—hooks in horses—prices current, advertisements, &c.

Printed by Sands & Neilson, N. E. corner of Charles and Market streets.

GREAT SALE OF STOCK BY AUCTION.

MR. JOHN BARNEY, formerly of Port Penn, Delaware, having given up his establishment at that place, intends selling all his stock thereon, remaining unsold, at public auction, on **TUESDAY THE 5th OF APRIL, NEXT**. They consist of

First, upwards of 50 **GENUINE BAKEWELL SHEEP**. It has been the peculiar pride of Mr. Barney, for about thirty years to rear this animal in its greatest purity and perfection, and the unexampled success he has met with in securing the best prices in every market within his reach, is perhaps, the best evidence which could be asked to attest its superiority. The Bakewell sheep are so well known, and so universally admired for their length and quantity of fleece, and delicious quality of mutton, that it is superfluous to dwell upon their high claims to popular favor, and the confidence of judges. In the prosecution of this, his favorite pursuit, Mr. Barney has spared no pains nor money to effectuate his object. Regularly every two years he has imported a Bakewell Buck from England, which have always been selected by a confidential friend and competent judge. From one of those Bucks thus imported, we have a sample of wool nearly two've inches in length, and which Buck is the sire of a part of his present flock, having sold him last summer for \$200 to General Garrard of Kentucky. Among the sheep which Mr. Barney will offer for sale on the 5th proximo, is an **IMPORTED BAKEWELL BUCK**, an animal which, when we saw him in October last, looked at a distance like a barrel enveloped in wool. In size, weight of fleece and beauty of form, he is equal to any thing of the kind we have ever seen.

Secondly. There are between 50 and 60 **MILCH COWS** and **HEIFERS**; most of which are of his own raising, and have had the advantage of his judgment in breeding. His object so far as the cow-kind are concerned, has always been to rear **DEEP MILKERS** with carcasses that would command a good price when cast off for slaughter. Among his present lot of cows, there are some that yield **FIFTEEN to TWENTY**, and in one instance, **TWENTY-SIX** quarts a day. These cows are judicious crosses of the Durham, Devon, Simms' and Girard breeds, all of imported origin and excellent families. The fame of the Durham cows for yielding full supplies of milk are too well known to need a remark; nor is the Simms' breed without high claims to pre-eminence as great milkers. Many of the cows have calves and others are in calf, most of them by a Durham bull of pure strain.

Besides these, there are several pair of **EASTERN WORK OXEN**, first rate and large size; two good **BREEDING MARES** in foal; several **COLTS** from 1 to 2 years old, and very promising; a number of **BREEDING SOWS** and **PIGS**. A **Family Dearborn Wagon**, gig, wagons, carts, ploughs and harrows.

ALSO

A fine thrashing machine of 4 horse-power, house-hold furniture, kitchen do., corn, wheat and rye by the bushel, and a crop of rye in the ground.

Terms made known at sale.

The editor of the Farmer and Gardener will attend the sale if encouragement offers, and will be happy to receive orders to purchase for any gentleman who may desire his agency.

March 22

2t

POTATO OATS.

100 Bushels seed potato oats—a choice article—for sale by **JAMES MOORE**,

Light, near Pratt st.

Mh 22 at the Maryland Agricultural Repository.

500,000 SILKWORM EGGS.

THE subscriber offers for sale 500,000 Silkworm Eggs low to close sales.

JAMES MOORE,

Agricultural Repository, Light, near Pratt st.

March 22.

GAMA GRASS SEED.

JUST received, a fresh supply of Gama Grass Seed. This is the grass that bears cutting every 15 days for soiling, and every thirty days for hay, from the middle of May till frost, say till the middle of November, and has yielded at the rate of 64 tons to the acre under peculiarly favorable circumstances, and from an acre of which 30 tons may be calculated upon. The earlier it is sown in the spring the better.

ROBERT SINCLAIR, Jr.

Maryland Agricultural Repository, Light near Pratt street.

Feb 9



FIELD & GARDEN SEEDS, &c.

WARRANTED GROWTH, 1835.

THE subscriber has just received and is now opening a large and superior assortment of **GARDEN and RARE FIELD** seeds, growth 1835.

All those seeds which can be raised to advantage in this country, are saved by careful seed raisers at the *Clairmont Seed Gardens*, near this city. Seeds which are found necessary to import are principally from the south of Europe, where they become so well matured, that their vitality is preserved much longer than those obtained from the humid climate of England.

Of the endless variety of *Cabbages, Lettuce, Peas, Beans, Cucumbers, &c.*, none are retained but such as are known to be truly excellent.

The most prominent seeds received, and in store, are

250 bushels *Garden Peas* of various sorts.

95 bushels *Dwarf and Pole Beans*.

2000 lbs. *Cabbage Seeds*. About 35 fine sorts, among which are the *Scotch Early York, London Battersea, Flat Dutch, Globe Savoy, Early Harvest, &c.*

150 lbs. *Cucumber seed*, about 12 sorts, among which are *Keene's Long Green, Long Green Turkey, &c.*

1800 lbs. *Radish seeds*—principally of *Short top Scarlet, Yellow and Red Turnip*.

300 lbs. *Beet and Mangel wurzel seed*.

50 lbs. *Green Curled Borecole*, or *Scotch Kale*, purple curled—blue curled, &c.

35 lbs. *Cauliflower and Broccoli*—best European sorts.

200 lbs. *Carrot seed*—for garden and field.

75 lbs. *Lettuce seed*—the curled *Silecia*, large white or *Lazy*, brown *Dutch* and *Malta*, are best sorts, the latter particularly fine for forcing.

270 lbs. *Onion seed*—several French and American sorts.

Also—*Tart Rhubarb seed, Tomato, Egg plant, Squash, Black and Orange Salsafy, Spinach, Peppers, Ockra, Flag Leek, Cress, Celery, Endive, &c.*

FIELD SEED.

60 bush. *English and Italian Rye grass seed*.

50 do *Green Sward grass*, for yards, &c.

1,200 lbs. *Scarlet Trefoil* or clover, *Trifolium Incarnatum*.

800 lbs. *Lucerne* or French clover.

50 bush. *English and Poland oats*.

250 lbs. *Skinless or Huskless oats*—new—great product.

150 bush. best *English and American Early Potatoes*.

100 lbs. *Gama Grass seed*—this grass bears cutting every 15 days, and of course the product is immense.

50 bush. *White and Yellow Field corn*.

ROBERT SINCLAIR, Jr. Seedsman,
Light st. near Pratt.

THE SILK MANUAL.

JUST published and for sale by *Sinclair & Moore* and *Robt. Sinclair, Jr.*, at the *Maryland Agricultural Repository*, Light near Pratt street, Baltimore, a complete *Manual of the Silk Culture*, in which plain instructions are laid down for the culture of the *Mulberry*, the feeding of the *Silk* worms, management of the cocoons, reeling, spinning and dying of the *Silk*. In fine, it is a perfect *Manual*, and comprises every department of the business. The rules are arranged in so plain and methodical a manner that every one can understand them, and by a very few hours attention become master of the business. It is clearly demonstrated in this *Manual*, that largely upwards of \$500 may be netted from an acre in the *Culture*; and it is a singular fact connected with the *Mulberry* as adapted to the making of *Silk*, that poor dry, sandy, or gravelly land suits it best, the fabric made from worms fed on leaves raised on such soil, being greatly superior in elasticity and richness of gloss to those grown on rich grounds.

Price—per copy, 50 cents.

Liberal discounts made to the trade.

RUFFLE OATS,

For seed, may be had at the *Maryland Agricultural Repository*, Light street, Baltimore, by application to
mh 22 **JAMES MOORE**.

AGRICULTURAL IMPLEMENTS, GRASS SEEDS, &c.

JAMES MOORE, successor of *Sinclair & Moore*, Light street near Pratt, tenders his thanks to the agricultural community, for the liberal patronage heretofore afforded to the *Maryland Agricultural Repository*, and respectfully invites the attention of farmers and others, to his stock of articles now on hand, comprising a large assortment of **PLOUGHS** of the most approved patterns, both wrought and cast shears, and of sizes adapted to all the purposes of agriculture—also *Hill side* and *double mould* board ploughs.

Corn cultivators of different kinds, those with five wrought tines generally preferred: Harrows of different shapes and sizes.

Corn shellers, the usefulness of which has been fully attested, and the increased sales of the last year, together with the many impressions of their utility, by those who use them, give evidence of their excellence—price \$20. Subject to a discount of 5 per cent for cash payment.—Price from \$15 to \$30. Improved *Wheat Fans*, of different sizes.

Cylindrical *Straw cutters*, a superior article for cutting any kind of long forage, 20 inch boxes adapted to horse power, \$75—extra knives per set \$6. 14 inch box adapted to manual power \$45—extra knives \$5 per set. 11 inch box which has some recent improvements \$30—extra knives, \$3 per set. Common *dutch straw cutters* from \$5 to \$7 50.

Garden and Field Tools, such as spades, shovels, hedge shears, mattocks, grubbing hoes, pruning tools, and hoes in a variety of forms, &c. Cast steel axes, warranted, Wove wire for screens, fans, cellar windows, safes, &c. Cotton Gins made to order—Grain Cradles—Harvest tools in their season.

Machines for sowing clover seed, which distribute the seed with regularity over a space of 12 feet at a time.

Having an *Iron Foundry* attached to this establishment, extra castings for ploughs of all kinds, Threshing machines, Horse powers, Mill work, window weights, &c. can be furnished or made to order of the best quality and at moderate prices.

FIELD SEEDS.

Orchard grass, Herds grass, Tall meadow oat grass.—Timothy and Clover; also on hand a lot of *Ruffle oats*.—Buckwheat, Millet, Potato Oats, &c.

Retail sales mostly confined to town acceptances, or to cash for which a discount will be made on implements.

March 8th.

FOR SALE ON MODERATE TERMS.

THE editor of the *Farmer and Gardener* has for sale two most beautiful *Devonshire Bulls*, rising three years of age each, of pure and celebrated blood. Also, one Bull 4 years old, a cross between a full bred *Durham* bull and a pure *Devon* cow. This noble animal combines in a remarkable degree the good points of both breeds. To gentlemen of the south who may desire to improve their stocks of cattle, the present is an opportunity rarely to be met with. All letters to the editor upon the subject must be post paid.
de 29

A GARDENER.

A person possessing a general knowledge of gardening in all its branches, and of farming, is desirous of obtaining a situation in the above capacity. He can give the best recommendation as to character and capacity.—Address applications to *W. B.* through the editor of this paper. All applications by letter to be post paid.
mar 8

A BROOD MARE FOR SALE.

A SUBSCRIBER in Virginia writes to us as follows:

"I have a considerable stock of Blood Horses on hand, which would allow me to spare a Brood Mare, by the celebrated *Contention*. Should any gentleman wish to breed from any of the imported or other horses in the south, it would afford a fine opportunity to purchase her and have her served before taking her to the north. She is young, has brought two colts, and can be accompanied by well authenticated testimonials of pedigree, as her sire is well known, and her dam was once owned by *Col. Wm. R. Johnson*."

Any person desirous of purchasing a Brood Mare of the above description, can be supplied by addressing a letter to the Editor of the *Farmer and Gardener*—post paid.

Feb. 16.

4t.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. F. ROBERTS.

No. 49.

BALTIMORE, MD. APRIL 5, 1836.

Vol. II

THIS publication is the *successor* of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, APRIL 5, 1836.

WORK FOR APRIL.

ON THE FARM.

This month is supposed by some to have derived its name from the peculiar tendency of its generally bland and delightful weather—of sunshine, rain, and genial air—to open, prepare, and enrich the earth for man—by others from *Aphrodite*, because, it is generally in European countries consecrated to this amorous goddess, who as the presiding genius of the affairs of love steals imperceptibly upon human affections, and has hallowed and handed down from generation to generation, the absurd and ridiculous practice known, and which obtains followers among all classes, of making *April-fools*. In ordinary years, in our climate, it may emphatically be called the month which sets in motion the whole field of vegetable life; whether it will prove so this spring is still a mystery buried in the womb of time. It was ushered in with a cold chilly drizzly rain, and although some have begun to break up their soil, the larger part of the business of spring husbandry has still to be performed. It is a month in which the farmer and planter must do much by way of laying the foundation of the year's crop. Time lost now, can scarcely ever be regained throughout the season, and as much of the work usually performed in March, has been thrown upon this month by the backwardness of the spring, he who would wish his fields to do him credit, and yield abundant crops must go to work with a resolute determination to deserve success. With this brief general introduction to the labors of the season, let us proceed to particulars.

OATS.

This forms, as it rightfully ought, a part of the husbandry of every good farmer; for notwithstanding the hue-and-cry that is raised against it on the score of its *robbing* the ground, and being a great *exhauster*, we maintain that every man who would desire to keep his horses, and especi-

ally his riding and carriage horses in *sound* flesh—who desires that the capacity for quick travel and endurance of fatigue should be imparted to them, should frequently feed them with oats, and the straw when cut and mixed with meal or chopped-rye, makes not only an acceptable food but one highly nutritious. In the preparation of the ground, it should be generously manured, ploughed well, and harrowed finely. Sow three bushels to the acre, harrow in, and as soon as the oats are two or three inches high, sow a bushel of plaster to the acre. The sooner the oats are sown the better. If you have not already sown your clover seed you may do so with your oats. Let a careful man follow the one employed in sowing the oats, with clover seed, and sow 12 quarts to the acre; one harrowing-in will answer for both crops.

CORN.

It is presumed that all your more stiff *corn* ground was ploughed up last fall or early in the winter; if so, it is superfluous to apprise you that the time is at hand to break it up, and it will only be necessary to tell you to list it for planting; but such as may not have been so fortunate as to be in that situation must break the ground forthwith, and prepare the soil for the corn crop. If the soil be a tenacious clay, deep and repeated ploughing and harrowing will be requisite; barnyard or stable manure should be applied just before the last ploughing, so as to be brought immediately in contact with the roots of the plants, and thus impart to them nourishment at the earliest stage of their vegetating: the furrows should be 3 feet apart, and listed at the same distance, so as that the corn would stand 3 feet asunder each way. Before planting your corn, soak it in a strong solution of saltpetre and sulphur, for 12 hours, then drain and roll the grains in plaister of paris.—Some prefer to pass them through a mixture of tar and fish oil before applying the plaister. If tar be used, we should prefer the gas tar, which from its offensive aroma would, we are sure, prove very repulsive to grub-worms, as also to crows and black-birds. If the common tar be used we are certain that Seneca oil would be found much more noxious than fish oil. Drop eight grains of corn into each listing, throw a *pint* of ashes over them, then cover up; when the plants are up, put a spoonful of plaister on each hill, so

as to shove them forward beyond the ravages of the cut-worm, a thing always desirable; but particularly so if your ground was not thrown into fallow the previous autumn or winter.

If your purposed corn land is a clover-ley, and was not ploughed up last fall, it would be well to put a light covering of lime on it to promote the decomposition of the tap and lateral roots, if it be but five bushels to the acre you will find infinite advantage to result from it. At all events your clover-ley should be ploughed several days before planting, so as to let the active fermentation which always follows the turning in of large bodies of vegetable matter subside somewhat before you put in your corn.

After your corn plants have assumed sufficient size to exempt them from further danger from the grub-worms, thin them out so as to leave but four plants in a hill.

If the ground to be put in corn be sand or sandy loam, it may not be necessary to subject it to such thorough ploughing, but even in such soil, I would plough much deeper than fashion has prescribed; for I hold the crown of the substratum in no reverence whatever, believing that the dread of breaking it, which generally prevails, to be a dangerous fallacy, and to have no foundation in common sense.

A word or two as to *seed corn*. In all close planting it has been recently suggested by a highly prized correspondent from Virginia, that the *northern corn would answer best*, we coincide with him in opinion, and should be happy in seeing it introduced into culture, in the whole of what may emphatically be called the corn-region of our country.

As to the *after culture*, it is almost impossible to prescribe any thing like a rule of universal application, the great object should be to keep the soil stirred and the plants clear from weeds, the cultivator may under certain circumstances be advantageously passed through the corn, three, and four times, but this practice is to be governed altogether by the state of the soil and season.

To prevent crows and other birds from disturbing your corn when newly planted, it is recommended to soak a sufficient quantity in a solution of *nux vomica*, or *arsenic*, and strew it about the corn field; but we confess we have no taste

for such insidious modes of warfare; the exhibition of poison whether to man, the proud tyrant of the earth, to the beasts of the field, or the birds of the air, always have been, is *now*, and we trust *ever will be*, abhorrent to our nature. If the birds must be destroyed, shoot them, let them die the death of the brave.

As you have probably not planted your early *potatoes*, you should lose no time in doing so now: your long manure should be used in the row or hill, whether planted the one way or the other, as besides being the most economical mode of applying it, it is decidedly best calculated to promote the prolific growth of this vegetable.

While you are planting your early crop put in a few bushels of seed *extra*, to be fed boiled to your milch cows and hogs, they will come in at a period of the summer when green food is mostly scarce. About 27 inches is a good distance for either row or hill culture.

Spring Grain.—As soon as the ground is sufficiently dry you should sow *Barley*, *Spring rye*, and *Spring wheat*.

PARSNIPS, CARROTS, AND BEETS.

You should sow your early crop of either of these delightful roots as early this month as possible. The best kind of ground for each is a rich loam inclining to sand; but if the ground be well and thoroughly manured, ploughed deep, and pulverized finely, they will grow in any soil. No farmer should omit sowing them, if for nothing else, as food for his cattle. They tend greatly to improve the quantity and quality of both milk and butter, and are highly healthful and nutritious to cows, and serve as an admirable food for store-hogs, suckling sows and their progeny.

MORUS ALBA OR WHITE MULBERRY SEED.

Sow your white Italian Mulberry seed in drills as early as you can get your ground ready this month. Your beds should be thoroughly manured, deeply dug, and well pulverized: keep the plants stirred and clean, and in dry weather water them twice or thrice a week, and always just before sun-down.

GRAPES.

The fields of artificial grasses of all kinds should have a bushel of plaster to the acre sown over them. A moist day, or very early in the morning, should be selected for so doing.

VETCHES OR SPRING TARES.

This is a species of the pulse or pea kind, and although but very little cultivated in this country, is greatly and deservedly prized in England, where every intelligent agriculturist has engrafted them into his system of husbandry. The

mode of culture is regulated by the object intended to be gained. If seed be the object, they are invariably sown in drills. If for hay, or green food for soiling, they are put in broad cast. About one bushel to the acre in the former and three in the latter mode of culture. If intended to be ploughed in for manure, four bushels of seed is not too much. They will grow upon any well manured and tilled soil, and may be sown any time this month, though it may be prudent to say, the earlier the better: if sown at intervals of two weeks, during this month, they would come in as a happy succession to supply the lack of green food in the natural pastures in the heat of summer. In London green tares are as much sought after in bundles as are clover and rye here. An acre will yield 3 tons of hay, which is very eagerly devoured by all kinds of stock. As a green crop to plough in, it is considered of great moment, and would prove a most valuable acquisition to be used as a pabulum for lime and calcareous manures generally.

FLAX AND HEMP.

It is time that you had sown your flax and hemp seed.

Before we close our operations upon the farm, permit us in the singleness of our purpose to direct your attention to a branch of the business of the husbandman, which we fear has been too much neglected: we allude to the rearing and treatment of hogs.

Many farmers do not raise a sufficient number of these animals to serve the purposes of their respective households, and if you ask them why, they will probably tell you, "Oh they are so troublesome, and then by the time that they are fatted each pound will cost you ten cents." Now these allegations may both be very true; but let us see what they are worth when submitted to the test of reason and argument. They are troublesome we freely admit, but we would ask what is to be done in this life without trouble? Are not all the acquisitions of man, whether intellectual or physical, achieved by labor? and why should he who obeys that injunction which comes to us sanctioned by the Source of all things, to get our bread by the sweat of our brows, expect to be exempt from trouble? Why trouble, in the sense here meant—is labor—which should be considered as the sweetening of life.

But let us admit that every pound of hog-meat does cost the raiser the sum named: and we would ask, what is gained by not raising any? Does he sell more corn or more roots by omitting to raise any? Is not the money which he has to lay out every fall for hog-meat so much

lost? Now we maintain that the heavy cost as alleged of raising pork arises altogether out of the imperfect system generally pursued in managing the hogs. They are turned loose in the woods to pick up a precarious living through the spring, summer and fall, and thus neglected, have but little size when put up for fattening, and generally speaking, when put up in the pen, are in addition to being small, so poor that they require a double quantity of corn to fatten them, and thus cost two or three prices in the raising.

Are we asked how we would manage them? Yes. Then our reply is,—If we had a sufficient number in family to require 20 hogs, we would lay off each year, 5 acres, to be divided in root and cabbage culture, we would pen our hogs altogether, and allot the tending upon them and culture of these five acres to a faithful hand, and as the labor of one man would be competent to all the work required to be performed, we would see that he took good care of his trust. Thrice a day he should boil or steam their food, whether it were potatoes, cabbages, parsnips, carrots, beets, turnips, ruta бага, or mangel wurtzel: and indeed, if he were a fellow of energy and ambition, he would, besides, be able to attend to the milch-cows which should also have the advantage of boiled food.

By pursuing this system each hog would weigh as much as two of those which had been treated with the *luxuries* of the woods, and of course would cost much less, because being in fine thriving condition on the arrival of the fattening season, they could be put in a state for killing with much less corn than those just taken from the range.

IN THE KITCHEN GARDEN.

For almost all the purposes of garden culture, unless the soil be a very tenacious and wet clay, *cow* manure is to be preferred. If your soil should be of this description, you will of course see the propriety of giving it well rolled horse-manure mixed with leached ashes and the vegetable mould from the woods. In applying your manure do not forget that almost every species of garden vegetables require full feeding, and that as a general rule you cannot plant your spade or plough too deeply.

CAULIFLOWERS.

If your early *Cauliflower* plants have been properly brought forward in a forcing border, they are now fit for transplanting, and the sooner they are set out after the weather becomes settled the better. In taking up your plants be sure to let as much earth as you conveniently can remain attached to the roots, and in order to effect this, it would be best to water the plants freely in the bed before

lifting them. Plant them down to the leaves; be sure to settle the earth well about the roots, and to form a slight hill around the plant with a hollow in the middle to catch and retain water, which should be occasionally given them in dry weather, until they are fit to be earthed up.

Cauliflowers cannot be raised in poor ground, and the proper soil for them is a deep, rich loam, which must always be backed with liberal portions of manure.

You should also, sow seed now to raise plants for cauliflowers to be earthed in October.

CABBAGES.

Transplant all sorts of early cabbage plants, and sow seed for your winter ones.

After transplanting your plants, they should be carefully inspected every morning for some days. Whenever you discover that the grub-worms have been at work, which you can always tell by the plants being cut off, you must immediately search for and kill the enemy. You may generally find him ensconced about half an inch under the ground, two or three inches off from the stem of the plant. To kill them is the only way to get rid of their ravages. A child of 7 years old, can do this work as effectually as a grown person.

Borecole, turnip cabbage, Scotch-kale, Brussels sprouts, Jerusalem-kale, broccoli, peas, beans, lettuce, radishes, small sallading, spinach, carrots, parsnips, beets, onions, tomatoes, egg plants, peppers, and indeed all other vegetables of the kitchen garden must be now sown, or planted.

CELLERY.

Transplant your cellery plants for an early crop. Prepare a spot of ground in beds three or four feet wide, manure and dig it up well, rake smooth; then plant the plants out, about three inches apart, and let them remain for about five weeks, when they will be fit to be put out in the trenches.

RHUBARB.

This delicious and delicate tart plant is too much neglected in our gardens, and we once more call the attention of every one to it who has a garden. It makes as good a tart as the gooseberry, is more healthful, and does not give half as much trouble.

The mode of culture is as follows:—Select a piece of rich sandy loam, manure it well; trench it two or three spades deep, level and rake it neatly, lay it off into beds of four feet depth, sow the seed in drills, thinly; keep the ground stirred, clean of weeds, and water well. The first winter they should be protected by a covering of brush or straw, with a plank thrown over it—after the first winter they will not require it.

In the second spring uncover your plants, hoe between the rows, lighten the earth and give a top dressing of rich mould or compost.

If you would enjoy this luxury at once, buy a few plants, say a dozen, they will be sufficient to supply your family with tarts. We would make this remark—no family where there are children should be without a few of these plants; besides being a delicious ingredient in the composition of tarts, they are an antidote to the diarrhea, dysentery, and cholera infantum.

IN THE FLOWER GARDEN.

As your early *hyacinths* will begin to develop their flowers this month, you must support their stems with small sticks, and to give effect to their appearance it will be best to paint them green.

The same remark will apply to *tulips*, with this addition, that when the flowers are expanded they ought to be shaded in order to prolong their bloom and lend a freshness to their respective tints.

If the weather be dry, your *Ranunculuses* and *Anemones* should be watered.

When your *Auriculas* expand their flowers, if the weather be rainy, throw a protection over them, and water them often.

Sow your *Dahlia* seed, and the plants will be fit for transplanting by the middle of May.

Roses should now be transplanted and pruned.

Evergreen shrubs and *vines* generally should be set out immediately.

Your *Carnations* and *pinks* should be shifted. Where they are in frames, they should be frequently aired and watered, so as to enure them to the transition they are soon to experience.

Your *Polyanthuses* and *Primroses* should be attended to now.

The *Jacobean lily* may be planted out towards the end of this month.

Your *walks*, *evergreen hedges*, *box edgings* and *glass plats*, must all be attended to, and in fact your eye and hands must be busy in every direction if you design to have a garden of which you may be proud.

FRUIT GARDEN, &c.

Trees which have not burst into leaf may in all safety be planted during this month. After planting them they should receive a good watering, which will answer for the two-fold purpose of settling the earth around the roots, and of causing them to push forth young and vigorous fibres; and we will here repeat what we have often advanced before, that many valuable trees are annually lost for the want of being watered,—what we mean

by the term, is not a mere sprinkling of the surface, but thorough soaking applications of water in sufficient quantities to reach the roots.

The *pruning* of such of your fruit trees, as have not been before trimmed, may now be advantageously attended to.

Currants, raspberries, and gooseberries, may now be transplanted.

Attend to your Strawberry beds; keep them clean of weeds, and clean away the runners as they may advance.

If you should want to make a new plantation of strawberry vines, let the strongest of the runners remain until June, when they may be taken off and transplanted.

Grape cuttings and vines may be planted out, if done early this month: and in a word, the eye and judgment of the judicious farmer, planter, or horticulturist, must be busy and actively employed in every direction on his premises, each must practice industry and economy, and exercise untiring vigilance, for without the exertion of these virtues, the best fields may prove unproductive, and loss and disappointment be his lot, when profit and pleasure should have rewarded his efforts.

WHITE AND OTHER WASHES, CHEAP PAINTS, &c.

As this is the month when the cleanly, prudent farmer should be giving his *barn*, *stables*, and other out-houses, *garden* and other *fences*, a coat of *wash* of some kind; and above all, as it is the period when the frugal house-wife by the aid of a coat or two of white wash makes old things look new and cleanses, and purifies her kitchen, pantries, and cellars, we take pleasure in annexing the following recipes from which each may select such as may suit his or her taste best.

TO MAKE A BEAUTIFUL AND LASTING WHITE-WASH.

Take $\frac{1}{4}$ peck unslaked lime, pour on it a kettle of boiling water; while the lime is slaking add half a gallon of stale chamber-lye; when the lime is perfectly slaked dilute it with water to the proper consistence, and add to this mixture $\frac{1}{4}$ ounce of Prussian blue. This will give you a beautiful and lasting wash that will neither peel off nor turn yellow, and will look nearly as well as white paint. By increasing the quantity of blue you may make either a pale or dark blue as best suits your taste—or if you prefer it, by adding yellow or red ochre, you may impart either of these tints to your wash.

TO MAKE A CHEAP PAINT OR WHITE-WASH.

Take 2 quarts skimmed milk
 “ 2 ounces fresh slaked lime
 “ 5 pounds whiting.

Put the lime into a stone vessel, pour upon it a sufficient quantity of milk to make a mixture resembling cream, then add the remainder of the milk. When this is done, crumble and spread the whiting on the surface of the fluid, in which it will gradually sink. It must, after all the whiting has been precipitated, be well stirred, or ground as you would other paint, when it will be fit for use. By the addition of any coloring matter you may make it suit your fancy.

It should be put on with a paint brush, and when dry a second coat should be given it.

The quantity above mentioned is sufficient for 27 square yards.

INCOMBUSTIBLE WASH AND STUCCO WHITE.

The basis for each is lime, which must be first slaked with hot water in a small tub or piggion and covered to keep in the steam; it then should be passed in a fluid form through a fine sieve to obtain the flour of the same. It must be put on with a painter's brush—two coats are best for outside work.

First. To make a fluid for the roof and other parts of wooden houses, to render them incomcombustible: and coating for brick, tile, stone-work and rough-cast to render them impervious to water, and give them a durable and handsome appearance.

The proportions in each recipe are five gallons. Slake your lime as before directed, say six quarts, into which put one quart of clean rock salt for each gallon of water, to be dissolved by boiling, and skimmed clean; then add to the 5 gallons one pound of alum, half a pound of copperas, three-fourths of a pound of Potash, the last to be gradually added, four quarts of fine sand or hard wood-ashes, say hickory. You may add any coloring matter that your taste may dictate. It should be put on with a painter's brush; it will it is said look better than paint, and be as lasting as slate; will stop the small leaks, prevent the moss from growing, and render the part painted with it incomcombustible.

Second. To make a brilliant stucco white-wash. Take clean lumps of well burnt stone lime (oyster shell lime will do as well,) slake as before directed; add $\frac{1}{4}$ lb. of whiting or burnt alum pulverized, 1 lb. of sugar, 3 pints of rice flour made into a thin and very well bodied paste, 1 lb. of clean glue, dissolved by simmering over a slow fire. It is more brilliant than plaster of Paris and will last for 50 years. It should be put on warm.

CHEAP WHITE PAINT.

One pound of unslaked lime, 1 lb. Spanish Whiting, 1 gallon of sweet Milk, 1 gallon Flax-seed Oil, 1 tablespoonfull of Salt—pour on the lime sufficient water to slake it, and while the lime is slaking, pour in the oil so as to cook it thin, add the whiting and salt, then pour on the milk and stir it well.

A CHEAP GREEN PAINT.

Take 4 lbs. of Roman Vitriol, and pour upon it a tea kettle full of boiling water: when the vitriol is dissolved, add two pounds of pearlash, and stir the mixture well with a stick until the effervescence ceases: then add a quarter of a pound of pulverized yellow arsenic, and stir the

whole together. Lay it on with a paint brush, and if the wall has not been painted before, two or three coats will be necessary. If a pea green be required, put in less, and if an apple green, more of the yellow arsenic. The cost of this paint is less than one fourth of oil color, and the beauty far superior.—*Yankee Farmer.*

DIRECTIONS

For the cultivation of the Amaryllis Formosissima, or Jacobean Lily, By Robert Sinclair, Jr. seedsman, Light near Pratt street, Baltimore.

This is a very magnificent flower. It throws out gracefully its carmine-coloured petals, which have a brilliancy almost too intense for the eye to rest upon. It must be planted in a clean, new soil, naturally rich: take some from under your grass plot, and mix in a little sand. Plant in April or May, in a pot, or in the open ground in a sunny situation: place the root so that the highest point is not more than one inch below the surface: it will flower in July and August, and will well repay the little trouble of putting it into the ground. In November cut off the stalks, take up the root, and after drying it for a few days, pack it in dry sand, and put it in the cellar, to keep it from the winter's frosts.

PROSPECTS OF MONMOUTH COUNTY, NEW-JERSEY.—For 50 years after the revolution this county existed in a state of supine torpor—not five lots were sold in all this time in the principal town of Freehold. A few years since was made a great discovery of marl, which has been a mine of wealth to the farmers, producing the richest pasture and grazing for cattle and sheep, and for making butter and cheese. The consequence has been that the farms which have within 10 years sold at \$10 per acre, now bring readily from \$50 to \$100. So much for the virtue of marl. Such is the wealth and enterprise thus brought into the country, that it is now proposed to make a railroad from the principal town to join the Camden and Amboy Rail Road at Hightstown, distant 10 or 12 miles with a spur or branch to the marl pits.

*To Printers—notice and caution—*A young man named Woodward Abraham was engaged for me in Baltimore, as a pressman, on good recommendations, at \$9 a week, and at permanent employment, and his travelling expenses from Baltimore to be paid. He came, worked one week, for which I paid him \$10 (having voluntarily advanced his wages to that rate per week,) and \$5 in part of his expenses. The next morning (Sunday the 27th) he left Petersburg by the Steamboat, for Baltimore—leaving the last sheet of this No. but half printed, without having given the slightest intimation of his intention, or having expressed the least dissatisfaction with my service.

EDMUND RUFFIN, }
Office of Farmers' Register. }

MIGNONETTE.—If you have a foot of ground under your window to spare, sow it in this modest little flower; it will scent your house with its delightful perfumes, and gladden your eye with its unpretending blossoms.

PROFESSOR DUCATEL'S REPORT.

(Continued.)

SEC. V. Geological examination of St. Mary's county, in reference to its agricultural resources.

St. Mary's county is longitudinally traversed by a ridge of diluvial gravel and sand, superincumbent upon a fossiliferous deposit belonging to the older pliocene period. This ridge attains its greatest elevation on the Patuxent side of the county, inclining gradually towards the south, and in the direction of the Potomac, until at various distances from it the country falls off in more abrupt slopes towards the flat lands on the river side. Between the ridge and the Patuxent, on the north side of the county, the country is very irregular and uneven; being a succession of short hills, separated by narrow and deep ravines, and spurring towards the river, which they sometimes reach, forming banks of from ten to thirty feet in elevation, but more generally terminating at a quarter or half a mile from it, leaving an interposed level. The direction of the ridge is north-west and south-east, declining in elevation, as already said, at this latter extremity, and forming an inclined plane of gentle descent towards Point Look-out, which terminates the peninsula.

The soil on the ridge land varies from sandy to sandy loam, rarely stiff, with a growth principally of pine. On the Patuxent side, the hills and valleys are composed alternately of sand and gravel, white and ferruginous clays, forming a soil varying from sandy and clayey to sandy and clayey loam, which, according to circumstances, is very productive in corn, tobacco, wheat and oats. The river flats are generally a stiff clay.—On the Potomac side, the soil of the highland is more commonly a sandy loam, the slopes are frequently gravelly, and the levels that are much more extensive on this river than on the Patuxent, are principally deposits of stiff clay, with here and there, towards the foot of the hills, tracts of a lighter soil. These soils that now, with the slightest efforts at improvement, yield good crops of tobacco, corn, and wheat, can, like all those on the tide-water districts of Maryland, be rendered by the use of calcareous manures exceedingly productive: and fortunately this means of improvement has been providentially placed within a most convenient reach from an abundant source, forming a prominent feature in the geology of the county.

In the report of the preceding year the fossiliferous deposits, constituting what has been termed *shell-marl*, were traced almost in an uninterrupted succession along the banks of the Potomac, and on the head-waters of the streams emptying into it, from the Piscatawa to the Wicomico. There was reason to expect, that they would continue to occur, under similar circumstances, beyond the latter river, and this expectation has not been disappointed. The *blue-marl*, described in the preceding report, makes its appearance on the Chaptico, and in the ravines descending from the uplands towards Bedlam neck. It again occurs at the head of St. Clement's bay, and will doubtless be seen wherever natural causes have removed the superincumbent soil, which is generally of considerable depth; or the marl may be discovered by the removal of the soil in favorable situations.

On Britton's bay, at the Papaw hollow, there is an extensive deposit of fossil shells, reaching from six to ten feet above tide, and a smaller bed occurs on the opposite side of the bay, on the plantation of Col. Harris. These alone would furnish an abundant supply of calcareous earth, sufficient to fertilize the whole county, if similar beds did not occur in numerous other localities. At the entrance of the bay, on Huggin's Point, nearly at the extreme end of Medley's Neck, a blue marly clay makes its appearance at low-water mark, enveloping fossil oysters. In the upper portions of this deposit the calcareous matter of these fossils has almost entirely disappeared, and is replaced by oxide of iron; whilst at a small depth in the bed, the shells are unaltered, but very soft, and readily disintegrate. This deposit is probably to be referred to the newer pliocene period, and is analogous to a similar one already mentioned as occurring at Cornfield Point, on the Potomac, but lying several feet above tide. It is presumed that this material could likewise be put to good account, which will probably be done by the intelligent gentleman on whose plantation it is found.

From Britton's bay to the St. Mary's river, no fossil deposit has been discovered; but on this river, at Windmill Point, at Pagan Point, and at the mouth of St. Inigo's creek, extensive accumulations of marine shells have long ago been known to exist, but they have not yet been used as marl. It is hoped, however, that the efforts made to demonstrate their value, will have been sufficient to induce their proprietors at least to give them a trial. The *gypseous clay*, mentioned in the first report of a general geological survey of the State, submitted to your Excellency at the close of the year 1833, which was stated to occur on the St. Mary's, and described as doubtless affording a valuable agricultural resource, has also remained entirely over-looked. The opinion is still entertained that it might be employed with marked benefits, especially upon the lighter soils in its immediate vicinity.

Between the St. Mary's, and Point Look-out, only one fossiliferous deposit has been observed, at Cornfield Point; it is a bed of black mud reaching from four to six feet above tide, in which are imbedded a few marine shells, (a large species of *pholas*, and a species of *fusus* principally,) above this there is a layer of oysters and clams from one to three feet thick, the whole covered by a stratum of gravel and sand from four to six feet deep. As the shells in this locality are similar to those that belong to testaceous animals that inhabit our Atlantic coast, the deposit is referred, as already stated, to the newest of the tertiary formations.—It cannot fail to prove valuable, as a natural bed of manure composed of calcareous and vegetable matters mixed with aluminous particles, all of which would necessarily tend to improve and fertilize the light sandy soil incumbent upon it.

The most extensive deposits of *shell-marl*, however, are found on the Patuxent side of St. Mary's county. In the deep gullies that furrow the country at the heads of the short creeks emptying into this river, the marl scarcely ever fails to make its appearance; and although occurring under disadvantageous circumstances for extraction, ought not for this reason to be neglected, as it would not be difficult to contrive efficient ar-

rangements for its removal upon a convenient place for subsequent distribution. A cheap and simple contrivance for this purpose has already indeed, been advised; as it may prove eminently serviceable to the planters of this portion of the country who are disposed to make a trial of the hitherto neglected resource which they have so near at hand, a figure of it, with some trifling modifications of that furnished to the Farmers' Register, by Wm. Carmichael, Esq. of Queen Anne, is appended to the report. With such an arrangement, we are informed that "where the *marl* is uncovered, with one efficient hand in the pit, and a less efficient one to discharge the boxes and drive the horse, five hundred bushels may be raised in a day."

The marls now referred to are of the best kind, consisting of beds of a sandy clay—filled with innumerable shells of marine animals, of which the large pearl shells, so called, (*perna maxillata*) are among the most numerous. The proportion of calcareous matter (carbonate of lime) in them is not less than from fifty to sixty per cent. so that they would doubtless prove a beneficial application to any of the soils on the Patuxent, and in employing them, the general directions which were given in the report of the year might be followed—namely, if the soil is already under a good course of cultivation, from three to five hundred bushels to the acre may be used safely and profitably. But it is hazardous to go beyond this quantity, especially in corn land; although it has been found that the succeeding wheat crop is improved, and that the land recovers in a few years from such an over-dosage. On new lands naturally well constituted, and containing much vegetable matter, there can be no risk in using the full quantity of five hundred bushels, or even more. Whilst on light sandy soils, or stiff clay soils, unimproved, three hundred bushels will be found sufficient, until the soil has been brought into a good state of tillage, when an additional quantity may be applied. It is always proper, of course, to select, as far as practicable, a clayey marl for a sandy soil, and a more sandy marl for a stiff soil.

It has already been said that a deposit of fossils forms the substratum of the portion of county now under examination from Indian creek to Town creek, so that the marl will probably be found in all the deep ravines that intersect it.—But they frequently occur in a more accessible position. Thus on approaching the river, the hills diminish in size, and form a line of isolated knolls, on the flanks of which, in several instances, beds of marine shells were observed of the same kind as those in the blue sandy clay of the ravines. These hills are composed sometimes of sand, and the latter present most ordinarily a bed of fossils. When they reach the river shore, so as to constitute its banks, sections of these hills are thus presented exhibiting their internal structure, and under these circumstances, almost invariably show that they are principally composed of shells and other marine productions.—Some of the banks of the river, in this way, exhibit a continuous deposit of shells, of a considerable extent, with an average elevation of twenty feet, and yield an abundant and easily obtained supply of marl. Such is the character of the river banks between Cole's and Thomas'

creeks; as also between Cat creek and Sotterly point.

These beds of marl rest on a greenish sandy clay, containing impressions of shells of the same kind as those in the marl, and where the impressions are most numerous the sand has become indurated so as to form a hard rock. At other places, the bank is composed of this greenish sand, rising from five to fifteen feet above tide, with only a few impressions, and imperfect casts, of undetermined shells. A deposit of this sand occurs on the plantation of Mr. George Thomas, on the Patuxent; another was observed near Leonard-town, on Britton's bay, and your Excellency will recollect that a bed of sand bearing similar characters, was pointed out by the undersigned on your own estate, at Nodley-Hall, on the Wicomico. It has been met with elsewhere; and as its position,—underlying the shell marl, properly speaking,—is important in directing the research that may be made for this latter material, independent of geological considerations, it may not be amiss to call the attention of those who take an interest in the subject, to the relation which it thus seems to bear to the more valuable article usually found above it. Whether, moreover, it may not itself prove of some value is yet to be ascertained. For the purpose however, of determining in a more satisfactory manner the precise relative position of this greenish sandy clay, with the fossil deposits constituting what has been termed *shell-marl*, an excursion was made to the Nominny cliffs, on the Virginia shore of the Potomac, where, from the condition of these elevated banks, it was expected some interesting geological facts might be displayed.—These cliffs, that are upwards of a hundred feet high, accordingly, exhibit at their base the same greenish sand, enveloping fossil bones, and covered by a fossiliferous stratum of the same character as the marl beds on Britton's bay and the Patuxent, and above all a thick layer of sand, gravel and soil.

Near the mouth of the Patuxent, at the Millstone landing, the river bank has an elevation of about thirty feet, its upper portion consisting of a sandy loam, containing fragments of fossil oyster shells, and resting upon a stiff clay, through which are disseminated crystals and crystalline masses of sulphate of lime, similar to those indicated as occurring on the St. Mary's river. This *gypseous clay* would no doubt prove a valuable addition to its superincumbent soil.

On the Potomac side of the county, at the head of Herring creek, a micaceous black sand was observed, answering in every respect of mineralogical characters to that found associated with the green sand of Kent county, on the Eastern Shore of Maryland, and also, as previously described, with the blue marls of Charles county; but the limited portions of this bed which it was practicable to examine, did not exhibit any fossil remains. The occurrence of such a deposit in this situation had attracted the attention of the undersigned, as well as that of the gentlemen who accompanied him in his first geological excursion through the State in 1833, and they had then agreed to refer it by its physical character of resemblance to what they then designated by the name of *copperas earth*, without attaching any particular importance to it; but closer examina-

tion having shown it to be so intimately allied in its *chemical* nature with the micaceous sands of the secondary period, it is believed to have hence acquired an additional degree of interest in a *geological* point of view; an interest which the undersigned will not fail to carry out according to his means and opportunities, in his ulterior researches. As an agricultural resource, if the views that were taken in the preceding section are correct, it will perhaps be thought worth the trouble of a trial.

It has been affirmed that the fossiliferous deposits described above, extend under nearly the whole of the peninsula lying between the Patuxent and the Potomac. Accordingly, even in its most central portions, wherever natural occurrences, as the force of a running stream, have removed the incumbent soil, beds of shell-marl make their appearance. Thus at the very head of one of the tributaries of the Wicomico, on the plantation of Col. William Matthews, in Charles county, an extensive bed of very excellent blue marl occurs. And again, on the head waters of the Chaptico, in St. Mary's county, on the farm of Mr. P. Briscoe, a deposit of marine shells has likewise been found; but in this position the shells are agglutinated together by a silicious cement, though they appear to have been originally enveloped by a sandy clay of a greenish-blue color. The marl here occurs, therefore, in large indurated masses, that are capable of being broken with no very great difficulty when first raised from the deposit, but afterwards harden by exposure to the air: it may perhaps be the surface portion of a more friable, and hence more valuable bed, lying at a greater depth. The occurrence of marl in these central portions of the peninsula, at the same time that it warrants the assertion that this material forms the substratum of the country, affords an inducement to search for it, at least in favorable situations; such as present themselves in the gullies at the head of the streams that empty into the alluvial bottoms, or *Freshes*, as they are here termed, of Charles and St. Mary's counties.

But, besides the marl, St. Mary's county, like all the other districts of the State on the tide-waters of the Chesapeake bay, possesses another source of calcareous manure, in the Indian shell banks, so accessible and so valuable, that it would be unpardonable to neglect them. These banks occur among other situations at the mouth of Indian creek, on the plantation of Major Sothoron, where their contents are now being used, and at other places, on the Patuxent, they have already been employed to great advantage. They are also found on the Potomac, in Bedlam neck, and on Blackstone's island, the north-west extremity of which is covered by an extensive bank of these shells.

It thus appears that the country is particularly favored in the occurrence within its own limits of an abundant supply of what *alone*, if even carelessly applied, is calculated to render its soil as productive as can reasonably be desired. If to this be added the advantages of a geographical position unequalled, perhaps, in the world—a peninsula situation of great beauty, under a temperate climate, and possessed of a soil yielding a great variety of valuable products—tobacco, corn, wheat, oats, cotton, &c.—that may be sent by a

short and safe navigation to a choice of markets; there can be seen no other impediment to its unbounded prosperity, but the indifference of its inhabitants to employ the resources which they have at their command. The opinion so generally entertained that the country is unhealthy, is unfounded excepting as regards certain spots. It appears to be the fact, although it may be difficult to assign a good reason for it, that the more elevated situations on, and at a short distance from the rivers, are exposed to the cause that produces autumnal fevers; whilst those on their low banks are remarkably healthy, and afford beautiful sites for delightful residences. The inland portions of the county, here called the Forrest, are likewise found to be entirely free of malaria. Having traversed the country at that period of the year when it is reputed to be most unhealthy, the undersigned feels authorized to state that he saw, or heard of, but very little sickness, and most of what he did see was probably due to unnecessary exposure.

[From the Tennessee Farmer.]

THE GOOD FARMER.

To constitute an accomplished Farmer, one who can pursue the honorable occupation to which he belongs, with honor, with profit, and with pleasure to himself, and with advantage to his country, the following traits of character are almost indispensable:

1st. He must be a man of integrity—one who would scorn to defraud his land, his beasts, his servants, or his neighbors—because, by doing either, he always injures himself, and often injures his country.

2d. He must be a man of thought and reflection—for without these he can never know how to direct his industry, or understand in what economy consists—and without well directed industry, and a wise and prudent economy, no farmer can prosper.

3d. He must understand how to create and how to preserve the fertility of his land—because, without increasing and preserving the fertility of his soil, his labor will generally prove to be both unprofitable to himself, and injurious to his country.

4th. He must know how to cultivate his land in that manner, which will enable him to obtain the largest product it is capable of yielding, with the least expense.

5th. He must understand the best modes of rearing stock, and of improving their breed.

6th. He must have industry enough to reduce his knowledge to practice—otherwise it can be of no value either to himself or his country.

7th. He must well understand the distinction between true and false economy, and rigidly practice the former, and avoid the latter—otherwise his labor will only be thrown away.

8th. He must be too wise to be vain and self-conceited—otherwise he will be above improving in his profession, and besides, vanity and self-conceit are disgusting and odious to others, and the most certain and infallible proofs of a weak intellect, and of a corrupt heart.

9th. He must possess a benevolent temper and disposition—because, without this, he can never so use the product of his labors, as either to promote his own or the happiness of others.

10th. He must be patriotic. This will induce him to seek to promote the public good, in which his own interest is involved.

11th. He must have too much honorable independence of soul, to be capable of degrading himself into a slavish partizan—otherwise he will infallibly become the dupe of artful and intriguing demagogues, or of corrupt political aspirants, who will be sure to use him for the accomplishment of their own base purposes, to the great injury of himself, and of his country.

12th. And to crown all, he should be a man of real genuine piety,—a piety that will prompt him in whatever he may be engaged, whether in the labors of the field, in the duties pertaining to social intercourse, or in those of devotion, to keep his eye steadily fixed on the promotion of the glory of God, by the improvement of his whole nature, intellectual, moral, and physical, and the welfare of all around him, whose happiness can be affected by his conduct.

Compared with such a farmer, to the eye of reason and of common sense, how contemptibly despicable do the herd of the vulgar great appear? To a mass of dishonesty, fraud, and deceit which would well nigh disgrace a Penitentiary, a disgusting, bloated vanity, a mean, base, and contracted selfishness; at war with every noble and generous emotion of the human soul—these latter characters, not unfrequently add the unsurpassable stupidity of believing, that their wealth, or their station, entitles them to a superiority over the honest, the intelligent, the virtuous, and the patriotic farmer, contrasted with whom, in the estimation of every virtuous and intelligent being, they occupy a rank no less inferior in dignity and worth, than that of the most worthless, profligate, swindling culprit, when compared with the most honorable and exalted of those distinguished benefactors of mankind, whose virtues and whose talents have shed a lustre on the dignity of human nature.

PLOUGHING UNDER GREEN CROPS FOR MANURE.

Being the owner of a small farm, most of which was in a low state of cultivation at the time I commenced making experiments, and feeling desirous of enriching it faster than I could with stable and barn yard manure, the quantity made being small, I therefore resolved to try the effect of ploughing under green crops. The piece upon which I tried my experiment contains nearly four acres, and is of a hazle-nut colored loam, lying near the Connecticut river.

In 1831, the lot above mentioned had wheat and rye reaped from it; about 1 3-4 were of wheat and produced 17 bushels, yielding 9 5-7 bushels to the acre. The 2 1-4 acres of rye yielded about 27 bushels, being 12 bushels to the acre—total of wheat and rye, 44 bushels. The ground for the wheat was ploughed three times and had the same number of harrowings. That for rye was ploughed but twice, with two harrowings; clover and herd's grass were sown on the whole piece. At the time of raising the grain I did not intend trying any experiment, but the grass seed not having come up well, the lot was ploughed once in August, 1832, and sown with rye, was fed down with sheep in the fall

and also in the spring, until about May; thus affording sufficient feed to pay the expense of the seed for the first crop.

After the sheep were taken from the grain, it was left to grow until about the time it blossomed, when it was ploughed under, and the ground sown with buckwheat—1-2 bushel of seed to the acre. When the buckwheat was in blossom, that also was ploughed under; after which the ground was suffered to remain until a short time before it was sown, when it was again ploughed once, with wheat and rye, October 3d. Previous to sowing the wheat, the seed was soaked about twenty-four hours in brine, and afterward rolled in plaster, where it remained in a body twelve or sixteen hours. My object in treating it in this manner was to prevent smut, and the ravages of the Hessian fly, which has several times destroyed some of my wheat; the rye was sown in its natural state.

In the spring of 1834 the whole piece was plastered with about two bushels to the acre. It was sown for the purpose of benefitting the young grass, and it has now (spring of 1835) come up well, and bids fair to produce nearly twice the quantity of feed usually obtained from it in a season. The quantity of grain which the piece produced the past season was as follows: About one acre was sown with white flat wheat and yielded 16 bushels—2 3-8 acres were sowed with red bearded wheat, and produced 33 bushels, making in all 49 bushels or 14 1-2 to the acre—5-8 of an acre was sown with rye and yielded about twelve bushels, being at the rate of 19 1-5 bushels to the acre. The increase of the wheat crop, according to the above estimate was more than 49 per cent. and that of the rye more than 59 percent. Had the past season been favorable for wheat crops, I doubt not that I should have obtained eight or ten bushels more. Perhaps some may think the plaster caused the last crop to be better than the preceding one; but I do not think it was, as I sowed some on a piece of rye the past season, a part of which was left unplastered, and it could not be discovered that the plaster benefitted either rye or land—the soil was the same as that on which the wheat was sown.

Northampton Cour.

WRITING!!

LADIES and Gentlemen residing in the country, and who may be desirous of improving their hand writing in a short time, are informed that on their visiting Baltimore, if they will call at Mr. Needham's WRITING ACADEMY, No. 146, Market street, between the Museum and St. Paul's street, they can have their writing changed from an awkward, cramped and illegible scrawl, to a beautiful, expeditious and uniform mercantile or epistolary hand in the short space of a few hours for the trifling sum of five dollars. Mr. N. promises to do more in the short time above specified towards eradicating vicious habits than by the ordinary method can be done in twelve years, or forfeit the sum of \$500. The following is a testimonial from several of his pupils in Baltimore:

We the undersigned Pupils of Mr. NEEDHAM, (Merchants and Residents of Baltimore) take this method of publicly expressing our perfect satisfaction of the improvement already made in our Writing, and pronounce him to be equal, if not superior in talents as a Teacher of Penmanship to any one with whom we are acquainted:

Messrs.—James M. Riley—Charles Kettlewell, Jr.—Edward Lea—Joseph Price—George Thompson—Francis Fairbairn—James Somervell—R. S. Harlan—E. Cook, Jr.—John Thomas Wood—James Lord—Thomas R. Brice—William Cooper—Jacob Burnett—Edward Bolton—George Russell—Misses—Mary Ann Power—Margaret Ross—Georgiana Tilghman—and Mrs. Elizabeth M. Stetson.

March 29

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,.....	bushel.	1 25	—
CATTLE, on the hoof,.....	100lbs.	8 00	8 75
CORN, yellow,.....	bushel.	76	—
White,.....	"	72	—
COTTON, Virginia,.....	pound.	—	—
North Carolina,.....	"	—	—
Upland,.....	"	18	18 1/2
FEATHERS,.....	pound.	48	—
FLAXSEED,.....	bushel.	1 50	—
FLOUR&MEAL—Best wh. wh't fam.	barrel.	7 75	8 25
Do. do. baker's.....	"	7 50	8 00
Do. do. Superfine,....	"	6 87	7 12
SuperHow. st. in good de'd	"	6 87	—
" " wagon price,....	"	6 75	—
City Mills, extra,.....	"	—	7 00
Do.	"	6 87	—
Susquehanna,.....	"	6 81	6 87
Rye,.....	"	—	—
Kiln-dried Meal, in hhds.	hhd.	20 00	—
do. in bbls.	bbl.	4 50	—
GRASS SEEDS, red Clover,.....	bushel.	5 25	—
Timothy (herds of the north)	"	—	—
Orchard,.....	"	none	—
Tall meadow Oat,.....	"	—	—
Herds, or red top,.....	"	—	—
HAY, in bulk,.....	ton.	18 00	20 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,....	"	7	8
HOGS, on the hoof,.....	100lb.	9 00	9 25
Slaughtered,.....	"	—	—
HOPS—first sort,.....	pound.	18	—
second,.....	"	16	—
refuse,.....	"	14	—
LIME,.....	bushel.	33	35
MUSTARD SEED, Domestic,.....	"	—	—
OATS,.....	"	44	45
PEAS, red eye,.....	bushel.	—	—
Black eye,.....	"	87	90
Lady,.....	"	—	—
PLASTER PARIS, in the stone,.....	ton.	—	5 25
Ground,.....	barrel.	1 50	—
PALMA CHRISTA BEAN,.....	bushel.	—	—
RAGS,.....	pound.	3	4
RYE,.....	bushel.	90	92
Susquehanna,.....	"	92	—
TOBACCO, crop, common,.....	100 lbs	5 00	5 50
" brown and red,....	"	5 00	7 00
" fine red,.....	"	7 00	9 00
" wrappery, suitable	"	—	—
for segars,.....	"	5 00	10 00
" yellow and red,....	"	6 00	8 00
" good yellow,.....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"	4 75	5 00
" ground leaf, ..	"	5 00	8 00
Virginia,.....	"	7 00	14 00
Rappahannock,.....	"	—	—
Kentucky,.....	"	8 00	14 00
WHEAT, white,.....	bushel.	1 50	1 60
Red,.....	"	1 40	1 48
WHISKEY, 1st pf. in bbls.....	gallon.	37	37 1/2
" in hhds....	"	36	—
" wagon price,....	"	33	33 1/2
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	2 75	—
To Wheeling, ..	"	3 00	—
Wool, Prime & Saxon Fleeces, ..	pound.	55 to 68	30 32
Full Merino,.....	"	48 55	28 30
Three fourths Merino,.....	"	45 48	26 28
One half do.....	"	40 45	24 26
Common & one fourth Meri.	"	36 40	22 24
Pulled,.....	"	38 40	23 24

GAMA GRASS SEED.

JUST received, a fresh supply of Gama Grass Seed. This is the grass that bears cutting every 15 days for soiling, and every thirty days for hay, from the middle of May till frost, say till the middle of November, and has yielded at the rate of 64 tons to the acre under peculiarly favorable circumstances, and from an acre of which 30 tons may be calculated upon. The earlier it is sown in the spring the better.

ROBERT SINCLAIR, Jr.

Maryland Agricultural Repository, Light near Pratt street.

Feb 9

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,.....	par		
Branch at Baltimore,....	do		
Other Branches,.....	do		
MARYLAND.			
Banks in Baltimore,....	par		
Hagerstown,.....	3a		
Frederick,.....	do		
Westminster,.....	do		
Farmers' Bank of Mary'd, do			
Do. payable at Easton,....	do		
Salisbury,.....	5 per ct. dis.		
Cumberland,.....	2a		
Millington,.....	do		
DISTRICT.			
Washington, } Banks, 3.			
Georgetown, }			
Alexandria, }			
PENNSYLVANIA.			
Philadelphia,.....	1a		
Chambersburg,.....	2a		
Gettysburg,.....	do		
Pittsburg,.....	1a2		
York,.....	1a		
Other Pennsylvania Bks. 1a2			
Delaware [under \$5]....	3a4		
Do. [over 5].....	2a3		
Michigan Banks,.....	5a		
Canadian do.....	5a		
VIRGINIA.			
Farmers Bank of Virginia 2a2			
Bank of Virginia,.....	do		
Branch at Fredericksburg, do			
Petersburg,.....	do		
Norfolk,.....	do		
Winchester,.....	do		
Lynchburg,.....	do		
Danville,.....	do		
Bank of the Valley,....	do		
Branch at Romney,	3		
Do. Charlestown, ..	do		
Do. Leesburg,	do		
Wheeling Banks,	1a2		
Ohio Banks, generally 2a3			
New Jersey Banks gen. 1a2			
New York City,	3a		
New York State,	2a3		
Massachusetts,.....	2a2 1/2		
Connecticut,	2a2 1/2		
New Hampshire,	2a2 1/2		
Maine,.....	2a2 1/2		
Rhode Island,	2a2 1/2		
North Carolina,	2a3		
South Carolina,	2a3		
Georgia,	3a3 1/2		
New Orleans,.....	4		

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured...	pound.	15	17
Shoulders,....	"	12	—
Middlings,....	"	13	14
Assorted, country,.....	"	—	13 1/2
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,.....	"	20	22
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old....	each.	4 50	6 00
Cows, new milch,	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 68	1 75
CHOP RYE,	"	—	1 87
EGGS,.....	dozen.	—	12
FISH, Shad, No. 1, Susquehanna, ..	barrel.	7 75	—
No. 2,.....	"	6 75	—
Herrings, salted, No. 1,.....	"	—	—
Mackerel, No. 2, 9 25;—No. 3	"	—	6 50
Cod, salted,.....	cwt.	3 00	3 25
LARD,.....	pound.	15	—

GAME CHICKENS.

FOR SALE, five dollars a pair, Game Fowls, warranted to be of genuine strain. Apply to the editor.

IMPROVED DURHAM SHORT-HORN CATTLE.

MR. POWEL'S entire stock of high bred Improved Durham Short Horns, imported or bred by him, will be sold at auction on SATURDAY the 23d of April next, at nine o'clock, A. M. at Powelton, on the Schuylkill opposite to Philadelphia.

Among them are—Ten young Bulls and nine Heifers, principally derived from animals, selected by Mr. Powel in England, in 1831. But one sale having been made for the last two years, the cattle having been reserved for the present sale. mh 29 4t* WM. HUGHS,

GAMA GRASS ROOTS.

5000 Gama Grass roots will be received, and for sale about the 20th of March. By obtaining roots of this valuable grass, farmers will gain the advantage of two years over seed plantation.

March 1

ROBT. SINCLAIR.

CONTENTS OF THIS NUMBER.

Work for April—recipes for making beautiful white and other washes, cheap paints, &c.—Continuation of professor Ducatel's report—properties of a good farmer—green crops as a manure—prices current, &c.—advertisements.

FARMERS' REPOSITORY.

No. 36 W. Pratt-street, Baltimore, Jan. 25, 1830.

THE proprietor avails himself again of the commencement of a New Year, to express his grateful thanks to his numerous friends and customers for their kind and liberal support of his Agricultural Establishment, and is happy to say that his ceaseless exertions to accommodate the public, have not been without a corresponding encouragement from them, and with his present improvements and Machinery, he is able to manufacture his Agricultural Implements much better than formerly, and with greater facility, and hopes to merit continued patronage. He now presents to the public an article new in its construction, for grinding corn and cob for feeding horses and stock. To those who approve this mode of feeding, this machine is worthy their attention. Also, Corn Shellers to be worked by hand or horse-power. He has a variety of Straw Cutters; but his own patented Cylindrical Straw Cutter is not surpassed by any other implement of the kind in existence; he has recently made some improvements in their construction, which adds to their cost, and for which he has been obliged to add a trifling advance on the price of the small size:—his prices for them being as follows, viz:

11 inch Revolving Bottoms \$30, with extra pair of knives.	\$33
11 " Permanent Bottom 28, do do do	31
13 " Permanent Bottom 43, do do do	48
13 " Revolving Bottom 45, do do do	50
15 " Revolving Bottom 50, do do do	56
20 " Large size fitted for horse-power 80, do do	90

His variety of Ploughs embraces almost every description and size that are worthy of notice, from a small seed Plough to the large rail road Plough—Gideon Davis' Improved Ploughs in all their variety, with cast and wrought shares; these castings are now made on his own premises, of the best stock and with special care; a supply of them always on hand to sell separate from the ploughs when required. Ox Scrapers for levelling hills, &c.; common and patent Wheat Fans; Fox & Borland's spring concave Thrashing Machines, large and small size, and portable horse powers for the latter; also one of Z. Booth's 2 horse Thrashing Machines and stationary horse power for the same; Brown's vertical patent Wool Spinners, and Watson's patent Washing Machine, both very simple and useful machines for families; Harrows; double and single corn and tobacco Cultivators; superior grain Cradles; and a great variety of other farming implements of a prime quality, and all on reasonable terms, at wholesale and retail.

Likewise in store—Orchard Grass, Timothy, and Herds Grass Seed of superior quality.

mh 22—e2m JONATHAN S. EASTMAN.

THE VIRGINIA CORN AND COB CRUSHER AND GRINDER.

THE subscriber having obtained a general privilege (and for certain territory an exclusive right) to make, use, and vend to others to be used, the Patent VIRGINIA CORN AND COB CRUSHER AND GRINDER, which was recently noticed in the Farmer and Gardener, is now manufacturing them, and will be prepared, in a few days to furnish this useful Machine, made in the best style.—Price \$60.

This Machine is constructed principally of cast-iron, is made in the most substantial and durable manner, and is not easily put out of order. With the application of a two horse-power, it is competent to reduce from 15 to 20 bushels of corn and cob to a suitable state to mix with cut straw, corn stalks, hay, or fodder, in an hour, and by hand-power, from 4 to 6 bushels an hour.

Those who have been accustomed to the feeding of stock need not to be told, for they are already aware, that the advantages of such a Machine, on a large estate where many domestic animals are kept, are almost incalculable; and to those who have small establishments it will prove of great value, as, besides saving at least three-fifths of the feed, it will enable them to dispense with the necessity of sending their grain to mill to be chopped.

JAS. MOORE,

Maryland Agricultural Repository,
Light st. Baltimore.

mh 22

POTATO OATS.

100 Bushels seed potato oats—a choice article—for sale by JAMES MOORE,

Light, near Pratt st.

Mh 22

at the Maryland Agricultural Repository.



FIELD & GARDEN SEEDS, &c.

WARRANTED GROWTH, 1835.

THE subscriber has just received and is now opening a large and superior assortment of GARDEN and RARE FIELD seeds, growth 1835.

All those seeds which can be raised to advantage in this country, are saved by careful seed raisers at the *Clairmont Seed Gardens*, near this city. Seeds which are found necessary to import are principally from the south of Europe, where they become so well matured, that their vitality is preserved much longer than those obtained from the humid climate of England.

Of the endless variety of Cabbages, Lettuce, Peas, Beans, Cucumbers, &c., none are retained but such as are known to be truly excellent.

The most prominent seeds received, and in store, are 250 bushels *Garden Peas* of various sorts. 95 bushels *Dwarf and Pole Beans*.

2000 lbs. *Cabbage Seeds*. About 35 fine sorts, among which are the *Scotch Early York, London Battersea, Flat Dutch, Globe Savoy, Early Harvest, &c.*

150 lbs. *Cucumber seed*, about 12 sorts, among which are *Keene's Long Green, Long Green Turkey, &c.*

1800 lbs. *Radish seeds*—principally of *Short top Scarlet, Yellow and Red Turnip*.

300 lbs. *Beet and Mangel wurzel seed*.

50 lbs. *Green Curled Borecole*, or *Scotch Kale*, purple curled—blue curled, &c.

35 lbs. *Cauliflower and Brocoli*—best European sorts.

200 lbs. *Carrot seed*—for garden and field.

75 lbs. *Lettuce seed*—the curled *Silecia*, large white or Lazy, brown Dutch and Malta, are best sorts, the latter particularly fine for forcing.

270 lbs. *Onion seed*—several French and American sorts.

Also—*Tart Rhubarb seed, Tomato, Egg plant, Squash, Black and Orange Salsify, Spinach, Peppers, Ockra, Flag Leek, Cress, Celery, Endive, &c.*

FIELD SEED.

60 bush. *English and Italian Rye grass seed*.

50 do *Green Sward grass*, for yards, &c.

1,200 lbs. *Scarlet Trefoil* or clover, *Trifolium incarnatum*.

800 lbs. *Lucerne* or French clover.

50 bush. *English and Poland oats*.

250 lbs. *Skinless or Huskless oats*—new—great product.

150 bush. best English and American *Early Potatoes*.

100 lbs. *Gama Grass seed*—this grass bears cutting every 15 days, and of course the product is immense.

50 bush. White and Yellow Field corn.

ROBERT SINCLAIR, Jr. Seedsman,
Light st. near Pratt.

THE SILK MANUAL.

JUST published and for sale by *Sinclair & Moore* and *Robt. Sinclair, Jr.*, at the *Maryland Agricultural Repository*, Light near Pratt street, Baltimore, a complete *Manual of the Silk Culture*, in which plain instructions are laid down for the culture of the *Mulberry*, the feeding of the *Silk worms*, management of the cocoons, reeling, spinning and dying of the *Silk*. In fine, it is a perfect Manual, and comprises every department of the business. The rules are arranged in so plain and methodical a manner that every one can understand them, and by a very few hours attention become master of the business. It is clearly demonstrated in this Manual, that largely upwards of \$500 may be netted from an acre in the Culture; and it is a singular fact connected with the *Mulberry* as adapted to the making of *Silk*, that poor dry, sandy, or gravelly land suits it best, the fabric made from worms fed on leaves raised on such soil, being greatly superior in elasticity and richness of gloss to those grown on rich grounds.

Price—per copy, 50 cents.

Liberal discounts made to the trade.

RUFFLE OATS,

For seed, may be had at the *Maryland Agricultural Repository*, Light street, Baltimore, by application to mh 22 JAMES MOORE.

AGRICULTURAL IMPLEMENTS, GRASS SEEDS, &c.

JAMES MOORE, successor of *Sinclair & Moore*, Light street near Pratt, tenders his thanks to the agricultural community, for the liberal patronage heretofore afforded to the *Maryland Agricultural Repository*, and respectfully invites the attention of farmers and others, to his stock of articles now on hand, comprising a large assortment of PLOUGHS of the most approved patterns, both wrought and cast shears, and of sizes adapted to all the purposes of agriculture—also Hill side and double mould board ploughs.

Corn cultivators of different kinds, those with five wrought tines generally preferred: Harrows of different shapes and sizes.

Corn shellers, the usefulness of which has been fully attested, and the increased sales of the last year, together with the many impressions of their utility, by those who use them, give evidence of their excellence—price \$20. Subject to a discount of 5 per cent for cash payment.—Price from \$15 to \$30. Improved Wheat Fans, of different sizes.

Cylindrical Straw cutters, a superior article for cutting any kind of long forage, 20 inch boxes adapted to horse power, \$75—extra knives per set \$6. 14 inch box adapted to manual power \$45—extra knives \$5 per set. 11 inch box which has some recent improvements \$30—extra knives, \$3 per set. Common dutch straw cutters from \$5 to \$7 50.

Garden and Field Tools, such as spades, shovels, hedge shears, mattocks, grubbing hoes, pruning tools, and hoes in a variety of forms, &c. Cast steel axes, warranted, Wove wire for screens, fans, cellar windows, sales, &c. Cotton Gins made to order—Grain Cradles—Harvest tools in their season.

Machines for sowing clover seed, which distribute the seed with regularity over a space of 12 feet at a time.

Having an *Iron Foundry* attached to this establishment, extra castings for ploughs of all kinds, Thrashing machines, Horse powers, Mill work, window weights, &c. can be furnished or made to order of the best quality and at moderate prices.

FIELD SEEDS.

Orchard grass, Herds grass, Tall meadow oat grass.—Timothy and Clover; also on hand a lot of Ruffle oats.—Buckwheat, Millet, Potato Oats, &c.

Retail sales mostly confined to town acceptances, or to cash for which a discount will be made on implements. March 8th.

FOR SALE ON MODERATE TERMS.

THE editor of the *Farmer and Gardener* has for sale two most beautiful Devonshire Bulls, rising three years of age each, of pure and celebrated blood. Also, one Bull 4 years old, a cross between a full bred Durham bull and a pure Devon cow. This noble animal combines in a remarkable degree the good points of both breeds. To gentlemen of the south who may desire to improve their stocks of cattle, the present is an opportunity rarely to be met with. All letters to the editor upon the subject must be post paid. de 29

A GARDENER.

A person possessing a general knowledge of gardening in all its branches, and of farming, is desirous of obtaining a situation in the above capacity. He can give the best recommendation as to character and capacity.—Address applications to W. B. through the editor of this paper. All applications by letter to be post paid. mar 8

A BROOD MARE FOR SALE.

A SUBSCRIBER in Virginia writes to us as follows: "I have a considerable stock of Blood Horses on hand, which would allow me to spare a Brood Mare, by the celebrated *Contention*. Should any gentleman wish to breed from any of the imported or other horses in the south, it would afford a fine opportunity to purchase her and have her served before taking her to the north. She is young, has brought two colts, and can be accompanied by well authenticated testimonials of pedigree, as her sire is well known, and her dam was once owned by Col. Wm. R. Johnson."

Any person desirous of purchasing a Brood Mare of the above description, can be supplied by addressing a letter to the Editor of the *Farmer and Gardener*—post paid. Feb. 16. 41.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 50.

BALTIMORE, MD. APRIL 12, 1836.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, APRIL 12, 1836.

ROOT CROPS, &c.

We have from time to time pressed upon our readers the propriety of giving more attention to the growing of root crops, and it appears to us that, as the spring is now beginning to develop itself and a few weeks will enable agriculturists to break ground in every direction, the present is a fit occasion to bring the subject once more to their notice, and respectfully to urge the propriety of adopting it upon their consideration. We have viewed for some time past, with feelings of no ordinary pride, a becoming interest awakening among many intelligent farmers to the improvement of their stock, and this circumstance has given us the more pleasure, as we hold it true beyond all contradiction, that for any one to succeed in the improvement of his stock, it is necessary for him to adopt the root culture, as a part of his system of husbandry, because a variety of root-feed is just as essential to the preservation of stock in good condition, as that it is important to give to a milch-cow succulent food to encourage the secretion of milk; and we hold it also equally true, that wherever the root crop is adopted, a meliorated condition of the soil will follow as a necessary consequence; for it is as certain as that the magnet attracts steel, that wherever roots are plentiful, cattle are well fed, and, of course, make large quantities of manure. It may be said that roots are exhausting crops—that may be very true—but if they be so, they furnish ample means of resuscitation; if the produce is, as it should be, mainly fed on the farm, and they serve too in an eminent degree as cleansers of the soil, and as such are decidedly useful in preparing it for small grain and other crops requiring similar preparation.

Besides the advantages to result to the agriculturist in the meliorated condition of his soil—in the improvement of his stock generally—in the greatly enhanced quantity and quality of his milk and butter—and in the increased plentifulness of

his house—the adoption of the root culture to a degree proportionate to the size of his farm and to the necessities and comforts of the inmates of his dwelling, and the tenants of his barn-yard and stables,—we say besides these advantages—and they are great and of infinite importance—he will be enabled not only to raise more hogs, but to keep them in better condition. Having premised thus much, it may neither be out of place to say something of the particular kinds of roots which we are desirous to see universally cultivated, nor unacceptable to briefly notice the modes of their cultivation respectively. And, as being first in order, we will commence with the potato, which as an article of human food has done more towards the sustenance of mankind than any thing else of the vegetable family, saving and excepting, perhaps, wheat, and we think the proposition might be sustained, that an acre of ground in the potato culture can be made to support twice as many as the same quantity of land in wheat; but of this it is not our object to speak, it is sufficient for our present purpose, to state, that the nutritive matter of potatoes is fully equal to one-fourth its entire bulk, and therefore not only a highly healthful article of food, but one which can be profitably raised. Now for the modes of culture.

OF THE POTATO.

Spurrier's method.—"Be careful," says he, "to procure some good sets; that is, to pick a quantity of the best kind of potatoes perfectly sound and of a tolerable large size; these are to be prepared for planting by cutting each root into two, three or more pieces, minding particularly that each piece be furnished with at least one or two eyes, which is sufficient. Being thus prepared, they are to be planted in rows not less than eighteen inches distance: if they are to be ploughed between, they must not be less than three feet, and if four feet apart the more eligible."

"The best method I have found by experience is to make a trench either with the spade or plough, about five inches deep, and putting long dung or straw at the bottom, and laying the sets on it at their proper distances, which is from 9 to 12 inches apart, covering them with mould. They must be kept clean from weeds."

Mr. Knight's plan.—"He recommends the planting of whole potatoes, and those only which

are of fine medium size—none to be of less weight than four ounces. The earlier sorts, and, indeed, all which seldom attain a greater height than two feet are to be planted about four or five inches apart in the rows, centre from centre, the crown ends upwards, the rows to be from 2 feet 6 inches to three feet asunder. The late potatoes, which produce a haulm above 3 feet in height, are to be planted 5 or 6 inches apart, centre from centre, in rows 4 or 5 feet asunder. The potatoes to point north and south and to be well manured."

Mackenzie's plan.—"Work the ground till it is completely reduced and free from root weeds. Three ploughings, with frequent harrowings and rollings are necessary in most cases, before the land is in a suitable condition. When this is accomplished form the drills; place the manure in the drills, plant above it, reverse the drills for covering it and the seed, then harrow the drills in length."

It is not advantageous to cut the seed into small slips; for the strength of the stem at the outset depends in direct proportion upon the vigor and power of the seed plant. The seed plant, therefore, ought to be large, rarely smaller than the fourth part of the potato; and if the seed is of small size, one half of the potato may be profitably used. At all events, rather err in giving over-large seed than in making it too small; because, by the first error, no great loss can ever be sustained; whereas, by the other, a feeble and late crop may be the consequence. When the seed is properly cut, it requires from 10 to 1200 weight of potatoes, from 12½ to 15 bushels, where the rows are at 27 inches distance; but this generally depends greatly upon the size of the potatoes used; if they are large a greater weight may be required; but the extra quantity will be abundantly repaid by the superiority of the crop, which large seed usually produces. Plant early in May."

Another method by the same.—"Dig the earth 12 inches deep, if the soil will allow it—open a hole 12 inches in diameter, 6 inches deep, put horse dung or long litter therein, about 3 inches thick—upon this dung or litter plant a potato whole, upon which a little more dung should be shaken, and then the earth should be put thereon. Take care that the potatoes be 16 inches apart."

When the young shoots make their appearance they should have fresh mould drawn around them with a hoe; they should again be earthed when the shoots make a second appearance. A plentiful supply of mould should be given them. A gentleman obtained from a single root thus planted very nearly 40 lbs. weight of large potatoes, and from almost every other root upon the same plot of ground from 15 to 20 lbs. weight."

Plan recommended in the new British Farmers' Calendar—Make the tilth fine, and upon the ridge from 20 to 40 cart-loads of manure to the acre must be put, which must be well stirred in with the last ploughing. From 10 to 15 bushels will plant an acre, and the eyes need only be used, two or three of them being laid together. Distance between the plants from 6 to 10 inches, between the rows from 2½ to 3 feet.

Barnum's plan.—"Plough deep and pulverize well by thoroughly harrowing; manure with compost, decomposed vegetables or barnyard manure; the latter preferable. When coarse or raw manure is used it must be spread and ploughed in immediately. Stiff clay soil should always be ploughed the fall previous. Lay your land in drills 27 inches apart, with a small plough, calculated for turning a deep narrow furrow running north and south; lay on the bottom of the drills 2 inches of well rotted barn-yard manure, or its equivalent, then drop your potatoes, if of the common size, or what is more important, that they contain the usual quantity of eyes—if more they should be cut to prevent too many stalks shooting up together: put a single potato in the drills or trenches 10 inches apart, the first should remain uncovered until the second one is deposited, to place them diagonally in the drills, which will afford more space between the potatoes one way, than if laid at right angles in the rows. The covering may be performed with a hoe, first hauling in the furrow raised on each side the drill, then carefully take from the centre of the space the soil to finish the covering to the depth of 3½ or 4 inches; by taking the earth from the centre of the space on either side to the width of 3 inches, it will leave a drain of 6 inches in the centre of the space and a hill of 14 inches in width gently descending from the drill to the drain, the width and depth of the drill will be sufficient to protect the plant against any injurious effects of a scorching sun or drenching rain. The drains in the centre will at all times be found sufficient to pass off the surplus water.

"When the plant makes its appearance above the surface, the following mixture may be used: for each acre take 1 bushel of plaster and 2 bush-

els good ashes, and sow it broadcast as even as possible, a moist day is preferable for this operation, for want of it a still evening will do."

"The operation of hilling should be performed *once and once only* during the season: if repeated after the potato is formed it will cause young shoots to spring up, which retards the growth of the potato and diminishes its size. If weeds spring up at any time they should be kept down by the hand or hoe, which can be done without disturbing the growth of the stalk."

"My manner of *hoeing* or *hilling* is not to haul in the earth from the space between the hills or rows, but to bring on fresh earth sufficient to raise the hill around the plant 1½ or 2 inches; in a wet season the lesser quantity will be sufficient, in a dry one the larger will not be found too much. The substance for this purpose may consist of the scrapings of ditches or filthy streets, the earth from a barn yard that requires levelling: where convenient it may be taken from swamps, marshes, the beds and banks of rivers or small sluggish streams at low water. If planted on a clay soil, fresh loam taken at any depth from the surface even if it partakes largely of fine sand will be found an excellent top-dressing. If planted on a loamy soil, the earth taken from clay pits, clay or slaty soil will answer a valuable purpose: in fact there are but few farms in the country but what may be furnished with some suitable substance for top-dressing if sought for. The hoeing and hilling may be performed with facility by the aid of a horse and cart, the horse travelling in the centre of a space between the drills, the cart-wheels occupying the two adjoining ones, thereby avoiding any disturbance or injury to the growing plants."

Mr. A. Robinson's plan.—He says:—"If I plant low ground I plough my ground in beds in a different direction for the water to drain off, then harrow lengthwise of the furrows and the small lands; having a number of them, side and side, I take a light sharp horse-harrow, and harrow crosswise of the beds, which pulverizes the ground and fits it well for planting, leaving a small space between the rows, which answers for two purposes, one for a guide for the rows for dropping: this is done by dropping in the middle of the tracks of the harrow, which is easily and correctly performed, by any small boy. It also serves completely to fill up all cracks or holes, the seed lying fair and easy. I then drop my manure directly over the seed potatoes, and when covered up, the seed is safe from inundation, by being some inches above the surrounding surface: the seed lies warm under this manure, the rains

drain into the middle furrows. I plant 3 feet distance; it takes the most of the surface that is pulverized to cover the potatoes, and by the time they are twice well hoed, my hills are as I want them to be. They naturally rise high above the surface in the form of a sugar loaf: this hill is to turn off heavy rains, and it naturally keeps the potatoes from being too moist, as they are often injured thereby. I have found that 3 feet each way is the most proper distance to ensure a good crop; I plant 3 common sized potatoes in the hill; it is no use to cut them: if cut small the vines come up small and weak, grow fast and fall down."

We have been thus particular in giving a condensed view of the modes of culture as recommended by several distinguished agriculturists, because we look upon *this root* as, perhaps, the most important of the numerous kinds which have been brought into cultivation by man. We shall treat of others next week.

REMEDY FOR THE BLOODY MURRAIN.

A correspondent of the *Genesee Farmer*, gives in the following extract of a letter, a very simple remedy for the cure of this disease. He says:—

"In answer to an inquiry in the *Farmer* a few weeks since, I would state, that I had an ox attacked with the *bloody murrain* this winter, so violently, that in two or three hours, he had discharged between three and four gallons of blood. I remembered to have heard it said years ago, that the green leaves of the mullein, steeped in milk, was a certain remedy. I lost no time till I found some of the leaves, having to dig under the snow for them. They were steeped in new milk, and about three quarts of the tea poured off without straining, given to the ox, which produced an immediate cure. I have since known a cow cured in the same way."

The above remedy being a simple one, and the ingredients within the reach of every farmer, should certainly entitle it to the test of experiment with every one who may have any of his cattle afflicted with this dreadful and fatal malady. We publish it with the view of eliciting attention, and would respectfully suggest to such of our readers, or others, as may try its curative powers to make report of the cases to us, in order that, if it really should prove to be a certain remedy, the owners of stock generally may be able to avail themselves of the information.

Those who may turn in clover-leys this spring should top-dress with lime, even if it be but ten bushels to the acre.

CHARTER OF THE NEW JERSEY SILK COMPANY

We are indebted to Mr. *George Green*, of Belvidere, New Jersey, for the subjoined copy of the act of incorporation of the above company; and we publish it for the information of others who may desire to form similar associations. This company calculate embracing within the range of the objects of their enterprize every branch of the business, from the raising of the mulberry to the manufacture of the silk into goods, and from the extent of their capital, \$300,000, will, if properly conducted, add immensely to the value of landed estates in that part of the country. The soil and climate of New Jersey are very happily adapted to the silk culture; and we have no doubt that success will crown this noble undertaking. The company shall have our most fervent good wishes to that end.

AN ACT TO INCORPORATE THE NEW JERSEY SILK MANUFACTURING COMPANY.

WHEREAS, William C. Morris, George Green, and John M. Sherrard of Belvidere, in the county of Warren, have, by their petition, represented that they are desirous of purchasing land, planting mulberry trees, raising and feeding silk worms, erecting and establishing manufactories of silk in all its various branches, and all articles of which it is a component part—Therefore,

Sec. 1. Be it enacted by the Council and General Assembly of this State, and it is hereby enacted by the authority of the same, That the said William C. Morris, George Green, John M. Sherrard, and such other persons as now are, or hereafter may be, associated with them, and their successors, be, and they are hereby constituted a body politic and corporate, in law, by the name and style of "The New Jersey Silk Manufacturing Company," for the sole purpose of planting mulberry trees, raising and feeding silk worms, erecting and establishing manufactories of silk in all its various branches, all articles of which silk is a component part, and dyeing, printing and bleaching the same; and by that name they and their successors shall have power, and continue to be a body corporate, and be capable in law of suing and being sued, pleading and being impleaded, answering and being answered unto, and defending and being defended, in all courts and places, and in all manner of actions, suits, complaints, causes and matters whatsoever; and they and their successors may have a common seal, and the same may make, alter and change at their pleasure; and they and their successors, by their corporate name, shall, in law, be capable of buying, holding and conveying any lands, tenements, hereditaments, goods, wares, and merchandises whatsoever, in said state, necessary and useful for the said corporation to carry on the manufacturing operations above mentioned, and all other real estate which shall have been bona fide mortgaged to the said corporation by way of security, or conveyed to them in satisfaction of debt previously contracted in the course of dealing, or purchased at sales upon judgments or de-

crees which shall have been obtained for such debt; *Provided always*, that the funds of said corporation, or any part thereof, shall not be applied, used, or employed, at any time, in banking operations.

Sec. 2. And be it enacted, That the stock, property, and concerns of the said company, shall be managed and conducted by five directors, being stockholders, one of whom shall be president, who shall hold their offices for one year from the first Monday of May in every year; and that the said directors shall be elected on the last Monday of April in every year, at such time and place as shall be directed by the by-laws of the said company; of which election, public notice shall be given of the time and place, not less than ten days previous, in one of the newspapers printed in the county where such election shall be made, by such stockholders as shall attend for that purpose, either in person or by proxy; and their elections shall be by ballot, and each stockholder shall be entitled to as many votes as he shall hold shares of the capital stock of said company, and the persons having the greatest number of votes, being stockholders, shall be directors; and if it shall happen at any election for directors, that two or more persons shall have an equal number of votes in such manner that a greater number than five shall by plurality of votes appear to be chosen as directors, then the said stockholders, shall proceed to ballot a second time, and by a plurality of votes, determine which of the persons having an equal number of votes shall be director or directors, so as to complete the whole number of five; and the said directors, as soon as may be after their election, shall proceed in like manner to elect by ballot, one out of their number to be their President, and shall at the same or some other time, elect an acting manager or managers, and such sub-agents, of the said company; and if any vacancy or vacancies shall at any time happen by death, removal, resignation, or otherwise, among the directors elected, the secretary, managers or sub-agent, such a vacancy or vacancies, shall be filled for the remainder of the year, in which they may happen, by such person or persons as the remainder of the directors for the time being, or the major part of them shall appoint.

Sec. 3. And be it enacted, That the capital stock of said company shall not exceed *three hundred thousand dollars, and shall be divided into shares of fifty dollars each*; but it shall nevertheless be lawful for the said company, when and as soon as a sufficient portion of the said capital stock shall have been subscribed for and paid, or satisfactorily secured to be paid, to purchase land and mulberry trees, and erect the necessary buildings and machinery, sufficient to commence the said business, and with that capital, conduct and carry it on until they shall find it expedient to extend their capital, which they are authorized to do, from time to time, to the amount herein before mentioned; and it shall be lawful for the directors of said company to call and demand from the stockholders, respectively, all such sums of money by them subscribed, at such times and in such proportions as they shall deem proper, under pain of forfeiting the shares of said stockholders, and all previous payments thereon,

if such payments shall not be made within sixty days after a notice requiring such payment, shall have been published for that time, in one or more newspapers published in the county where such payment shall be required to be made.

Sec. 4. And be it enacted, That the stock and property of the said corporation, of whatever nature or kind, shall be deemed personal estate, and shall be transferable, in such manner as shall be prescribed by the by-laws of said corporation: *Provided*, that no dividend shall be made to and amongst the stockholders, except from out of the profits of the said corporation.

Sec. 5. And be it enacted, That in case it should at any time happen that an election should not be made on the day that, pursuant to this act, it ought to be made, the said corporation shall not, for that cause, be deemed to be dissolved, but it shall and may be lawful to hold such election on such other days, in the manner aforesaid, as shall be prescribed by the by-laws and ordinances of said corporation, and the officers of the preceding year shall hold their offices, respectively, until said election, or until others are appointed in their stead.

Sec. 6. And be it enacted, That a majority of the directors, for the time being, shall form a board for the transacting of the business of the corporation, and shall have power to make and prescribe such by-laws, rules and regulations, not repugnant to the laws and the constitution of the United States, or of this state, as shall appear needful and proper, touching the management and disposition of the stock, estate, property, effects and profits of the said corporation, offices, appointments, clerks, managers, agents, servants, salaries and allowances as to them shall seem necessary, and may, at their discretion, remove or discharge from their employ, any manager, agent, secretary, clerk, or other person engaged in said factories or business, and supply their places by the appointment of others in their stead.

Sec. 7. And be it enacted, That the directors, shall, at all times keep, or cause to be kept, at their manufactory, or manufactories, proper books of accounts in which shall be regularly kept, all the transactions of the said corporation, which books shall at all times be open to the inspection of the stockholders of said company.

Sec. 8. And be it enacted, That no transfer of stock shall be valid, until such transfer shall be entered or registered in the book or books, to be kept by the president and directors, for that purpose.

The 9th and last section provides for the alteration and amendment of the charter.

WHITE MULBERRY TREES, as well as the *Morus Multicaulis*, are in great demand this spring. One gentleman in this town who owns near thirty thousand trees, has been offered \$30 per thousand and refused it. More White Mulberry seed will be sown this spring, so far as we can learn from different quarters, than has been planted for five years. As an article of profit, aside from the design of raising cocoons, we know of no more lucrative investment. They can be sold any hour for *Cash*, and the expense of cultivating them is comparatively nothing. In this season of scarcity of hay and grass, had our far-

mers occupied part of their grounds with mulberry trees, rather than grazing cattle, the difference in their favor would be immensely great. The large silk companies going into operation this spring will consume all the trees which can be purchased. The supply is not half equal to the demand. And whether the trees are sold or not, is not a matter of much consequence. The value of a farm with mulberry trees standing in all the waste places, around outhouses and fences and in every unoccupied spot, must increase its intrinsic value immensely.—*Northampton Cour.*

SEWING-SILK is selling in this town at \$10½ per pound. It is becoming a scarce article, and already we feel the necessity of having our Northampton silk company in operation. It has been ascertained by a careful computation, that not less than \$15,000 worth of silk stuffs were sold in this town during the year 1835. One firm sold \$4000 worth. Only think of that! Fifteen thousand dollars sent out of this single town to purchase the one luxurious article of silk! When if our farmers had had the business of silk growing in their eye five years since, this comfortable amount could have just as well been put in their own pockets. What one item of produce is there raised in the Northampton Meadows which furnishes an income of \$15,000?—*Northampton Courier.*

A WAY TO GROW EARLY POTATOES.

By Mancuniensis.

On walking out the other afternoon, in company with some other friends, we were caught in a thunderstorm, and obliged to take shelter in a farm-house, the owner of which was known to one of the party.—During the storm, the conversation turned upon gardening, and our host gave us a plan for raising new potatoes, which I send you. It may appear strange, but, as he says, he has tried it, and found it to answer very well. At all events, I think it worthy of consideration and a trial. I give his own words, so far as my recollection serves:

"I was getting up my potatoes one year, in that field below the house, when the thought struck me, that by planting the smallest of them again, immediately, they would grow, and I should have new potatoes very early. I resolved to try the scheme. I had no hothouse or greenhouse, and was therefore to hit on a plan for keeping off the frost, which I did as follows. I chose a part of the field in which I was working, and made trenches along the top and the sides to keep it dry, I then covered it a few inches deep with litter, and put on a few inches of soil, and planted the potatoes, covering them again with soil. In order to keep the earth from falling down and smothering them, when they began to shoot, I stuck sticks and brush wood over the last layer of soil, and put on a quantity of litter, covering the whole with soil. One of my neighbors who saw me, was surprised, and said he was sure I should have nothing in the end, but I told him to come again on new year's day, and we should see. We did so, and we opened the bed and found new potatoes about the size of a marble; I then told him I would leave it until the 6th of March. I did so, and on opening it again, the new potatoes

were as large as an egg, exceedingly well tasted, and quite mealy. I showed some to the gardeners in the neighborhood, who would scarcely believe me, when I told them how I had grown them."

The situation in which they were grown, and which I myself saw, was on the north side of a hill, in the northern part of Lancashire, not on the warmest situation in the world, as you may imagine.

The idea of growing potatoes in the manner above stated, is good, but my informant's mode is, I think, capable of improvement. If, instead of the side of a field, an old hotbed were used, and hoops placed so as to prevent the soil from falling down and pressing down on the young shoots, which would not grow very high, as potatoes when deprived of light do not grow so much above-ground as they do naturally, I think early potatoes might be raised without any expense. I intend to try it, at all events, and hope some of your readers will do so likewise.

PREVENTING THE RAVAGES OF THE BEE-MOTH. To the Trustees of the Massachusetts Agricultural So.:

Gentlemen:—For four summers past, I have had an experiment in hand on the subject of raising bees, and preventing the ravages of the bee-moth. As its results, thus far, have been satisfactory to myself, I will present you with its details, and if you think it offers a "satisfactory mode of preventing the ravages of the moth," and may, by publication, or otherwise, be instrumental in promoting the interest of domestic economy, it is at your disposal.

I prepared for the experiment in the spring of 1831, by making a bee house about seven feet square in the south-east corner of my corn house chamber. The partition on two sides is of double planking, laid so as to break joints; on the other two sides of the room, a ceiling of boards is put on the inside of the studs and also of the rafters of the building, to counteract in some measure the effect of severe heat or cold, or sudden changes in the weather. A small door is made for entrance on the inside, secured by a hasp and staple. The whole is of rough materials, but made substantial; tight enough to keep out mice, and dark. The cost of labor and materials was about six dollars. The floor of the chamber is about eleven feet from the ground, and three feet below the eaves of the house. Near the centre of the room was placed a frame or stand, for the reception of the hive, about three feet high, made of four upright pieces of scantling fastened together with rounds, and of such dimensions that the hive divested of its floor board might rest by its four corners, on the tops of the scantling, in the notches about an inch deep cut from their inside corners. The top of the stand is about on a level with the top of the beam, along which—fronting the south—an aperture about a foot long, and half an inch wide, is cut through the lining and outside boards, for the passage of the bees, and pieces of thin board are laid from the stand to the beam for them to travel on.

The object, so far as respected the moth, was to see if bees would not protect themselves from its ravages, without any other care than placing the hive where they would be likely to have an

eye upon its outside, and in a situation favorable for its defence. And this arrangement was adopted from an opinion that bees thus situated would probably extend their combs around upon the outsides of the hive, in which case the millers, unless they were able to contend successfully with the bees on open ground, would have to seek some place other than their favorite one, the outsides of the hive, to deposit their eggs. If they were compelled to take the latter course, the points of connexion between the hive and other objects being small and few, would render it more difficult for the young worms to find their way to the hive, while from the same causes defence on the part of the bees against all such intruders would be more easy.

Having the premises thus arranged, in April I purchased a hive of bees of a farmer a few miles distant, who had about half a dozen swarms that had been kept over winter. His hives were mere boxes of rough boards. The crevices, or joints, if they could be called such, were large and open on the outside and well fitted to accommodate the millers with places of deposit for their eggs in the immediate neighborhood of the comb; a place which, of all others, they seem most anxiously to seek, as affording the best and perhaps the only prospect of good living to their young progeny. He had never lost any swarms, by the moths, and was not aware that they were about his hives until two or three were drawn from a crevice in the hive purchased, which was considered second or third best; some of his swarms appeared rather weak at the time, and I have since learned that they were all destroyed by the worms and moths before the close of the next season.

In examining my purchase after it was brought home, I found apparently a good swarm of bees, and the hive filled with combs. A few moths and worms also were found in the crevices and under the edges of the hive, which were destroyed. The hive was then removed from its floor, and placed on the stand in the bee house. The bees had, previous to this time, (as I believe is usually the case where the hive stands on the floor, or is exposed to the weather,) confined their attention to the inside of the hive. They now commenced operations on the outside; and in a few days every crevice and joint was sealed up, and every rough place on the outer surface that might possibly afford accommodations to the millers was varnished over. A small piece of board that inadvertently had been left on the top of the hive cost them considerable labor; before it was discovered they had glued it down to the hive with a close joint, and unfitted it in every respect for the use of an enemy which was even then in possession of a part of the interior of the hive.—Of this fact, at the time, I had not a suspicion.—As far as could be seen after they were placed on the stand and the lower parts of the combs exposed to view, all appeared right; and the bees went cheerfully to work. They were visited almost daily for some weeks, in which time they commenced lengthening down their old combs and building new ones on the outsides of the hive. In one of these visits, a few dozen of bees were observed clustered together on the face of one of the combs, as far up as could be well seen, actively engaged with and about something, the nature

of which I could not well determine. In another day or two, however, the matter was more fully explained by something six or eight inches in length, dangling from the place of operations; this was removed with a stick, and found to be a mass of web. Intermingled with the web were worms, moths, empty cocoons, and dead bees.—Most of the bees were fastened firmly with web by their heads to the cocoons or cots of the moths, in a transverse position, and appeared as though they had been entangled and slain, and their juices extracted by the moth. In some instances, three or four were fixed to one moth, along side by side as he lengthened out his shell; that nearest his head fresh and evidently a recent capture. The whole of the webs, with the matters appertaining, which the bees let down from the hive in a few days time, I thought would, if loosely thrown in, have nearly filled a quart measure.

After the expulsion of the moths, the bees continued their usual operations, and from that period to the present time seem to have suffered no further injury or serious molestation from those insects.

For the two last seasons the door of the bee house has been left open during warm weather, to give free passage out through an open window; their place of entrance not being large enough to accommodate their increase of numbers. This has given the millers free access to the house at all hours; and that they have been present is shown by the worms and moths found in and about the floor at the foot of the stand beneath the hive, and about the ceiling near the place of entrance; but all their attempts at the hive seem to have been frustrated. The supervision and vigilance of the bees have been extended as well to the outside as to the inside of their domicil. In the spring of 1833, four small boxes were placed on the top of the hive, inverted, with a corner of each projecting over for the admission of the bees, in the hope that they would fill them with honey. Those boxes remain unoccupied to the present time, the bees preferring to build below the hive rather than above it, but every joint about them, inside and outside, however nice it might be, has been sealed over with the most jealous care, and the whole made fast to the hive in the closest manner. Indeed it would seem that unless they have been taught necessary measures by experience, their instinctive "half-reasoning minds," have dictated a course of proceeding, that is not only in itself best calculated, but instituted solely, for the purpose of defeating the intention of the miller. I cannot but regard it now as a fortunate circumstance that there were moths in the hive at the commencement of the experiment, a fact that, in connexion with the result, goes farther than almost any other could go to demonstrate fully that bees are equal to the task of defending themselves from its ravages. For most certainly, if a given situation will enable them to expel a large number which have previously effected a lodgement in the interior of the hive, the same situation will enable them to dislodge individuals in their earliest approaches; and that their exertions will always be measured only by their ability in the case, there is perhaps little room to doubt. The quantity of honey taken from the hive in the three past seasons would al-

together amount to not far from 25 lbs.; this was cut from the outside of the hive, and is probably a very small part of what might have been taken with safety, or of what is now on hand, and may be justly thought a small return. It will be recollected, however, that the object was not to get the greatest quantity of honey in a given short period of time; but to make an experiment with reference to the moth; and a few pounds more or less could not be considered a compensation for defeat, or hazard of defeat, in the main object; as would have been the case by taking too much and starving the bees—an event that happened to a neighbor of mine a few years since.

Bees will probably be more industrious, if their stores on hand are moderate, but it is a cruel alternative, to present them, near the close of the season, with being either worked to death, or starved to death, as in the case referred to. A dilemma of that nature might easily be obviated by taking the honey in the spring, after the bees are able to get a supply from abroad, instead of taking it in the fall, as is usual. And probably all over what they want to carry them through the winter, may thus be taken from year to year with safety, and at the same time it may operate as a sufficient corrective for the idleness which old swarms, "rich and increased in goods," are said to manifest. Not having previously kept bees, my knowledge on the subject was very limited, and from motives of caution no honey was taken out the first season. The past season a small quantity was taken, as I intend to remove the old hive and place in its stead one of a better construction in the spring. That will remove the old cells that have become small and unfitted to perfect the growth of young bees, and give place to new ones better adapted to the production of bees that are large and vigorous, to supply vacancies that "by flood or field" are made in the ranks of the old ones. And I see no reason why a swarm under a course of such treatment, (unless some new enemy shall arise,) may not be kept with both pleasure and profit for many years.

The number of bees probably need only be limited by the richness and ability of our forests and fields, to invite and remunerate their labors, and until such limits are exceeded, any one possessing a spare garret or loft in house or barn, may at a trifling expense enjoy the luxury of a yearly supply of fresh honey of his own raising.

Three entire seasons have now elapsed since the moths were expelled from the hive, and as yet the millers have given no evidence of ability to replace them with another brood. The time, considering the attendant circumstances, will probably be thought sufficient for a fair test of the plan adopted, and if one experiment will warrant it, would seem sufficient ground for the opinion, that bees, if favorably situated, may safely be left to protect themselves from the ravages of those insects, without resorting to screens or traps of any kind to prevent their approach.

The plan of appropriating a small room to one swarm of bees, although not new elsewhere, I believe is not common in this section of country.—In some respects, I apprehend, it offers advantages over the common method, beside that for protection from moths. The bees will not be under the necessity of swarming or colonizing for years,

and the trouble of hiving, (an item of some consequence to those not versed in the business,) or the danger of losing young swarms, for a time, at least, are obviated.

I subscribe myself, with great respect,
Your most obedient servant,
WILLIAM CLARK, JR.

[From the Ohio Review.]

PRODUCT OF THE RUTA BAGA.

Having seen much published upon the subject of raising Ruta Baga, all of which has fell short of the crop I took last fall from a small piece of land, I am induced to give, not only the amount, but the manner of cultivating. To give the amount alone, of any particular crop, without the manner of cultivating, is no benefit to any one.

I had a piece of dry sandy land facing the south, which I wished to prepare for a fruit garden; and making more rich and level than I could do by ploughing. I therefore covered the ground about an inch thick with manure; and with a spade, dug and turned in the whole, to the full depth of the spade; taking care that each load was covered as soon as possible, after spreading to prevent loss by evaporation. This was done, or finished the fifth of June. I then waited until I discovered indications of rain, which I think was on the tenth of the same month, when I immediately took a hand with me, and commenced raking the ground with an iron tooth rake. I next took a large rake made of three inch scantling, with five teeth, fifteen inches apart, and having a man to hold, drew it across the ground, the direction which I wished to have the rows to run, making five marks. After that, we placed one outside tooth, in one outside mark, making four marks, until the whole was completed. I then dropped the seed quite thick in every row except the last eight, where I then skipped every other row, leaving them thirty inches apart, instead of fifteen. They came up in a very few days. I then took of gypsum, one part, of ashes two parts, and having mixed the same sprinkled about a quart per rod on each row.

In five or six days, I thinned them out, so as to leave them from four to six inches apart. Ten days after, I hoed them again lightly, and gave them another dressing as before, which was all the labour bestowed upon them, until they were pulled.

From five rods of ground planted 15 inches apart, I gathered 61 bushels, measured in a 2 bushel measure, weighing 58 lbs. to the bushel, which would make 1952 bushels to the acre, or 113,216 lbs. equal to 50 tons 1216 lbs. From the ground where the rows were 30 inches apart, the yield was at the rate of 1424 bushels to the acre, the turnips are larger, consequently not quite so heavy per bushel. One of the largest weighed 15 pounds. The above statement may appear incredible, still it is true: I was at first loth to believe it myself, and went and remeasured my measure, examined my figures, and found that all was correct, and "that facts were stubborn things."

In submitting this to the public, I am influenced, less from a desire to boast, than from a sincere wish to have others communicate the result of their experiments in agriculture, thereby benefitting community at large. Respectfully yours,
Stow, Jan. 22, 1836. WM. WETMORE.

PROFESSOR DUCATEL'S REPORT.

(Concluded.)

SEC. VI. *Progress of the Geological Survey of the State.*

By referring to the report of the preceding year in connection with the account so far furnished to your Excellency in this, it will be seen that the survey of the State, made to this period, embraces on the Eastern Shore of Maryland, all the counties south of the Chester river, together with some preparatory examinations commenced in Kent county; and it may be here further stated, that as the contemplated map of the State will necessarily comprise the two Eastern Shore counties in Virginia, forming the extremity of the peninsula, it was thought advisable to extend the examinations over these counties also, with a view of ascertaining, by actual observation, the suspected uniformity in the operation of the physical causes that have produced the geological features of this whole section of country, between the Chesapeake and the Ocean. Should the legislature of Delaware think proper to order a survey of that State, similar to the one which Maryland is now pursuing, a full account of the geology of the great peninsula lying between our bay and the Delaware might thus be obtained, that could not fail to prove of great interest to science. Your Excellency will permit the undersigned likewise to make, in this place, due acknowledgment of attentions and civilities received by him from Thomas R. Joyner, Esq. of Accomack, and John Eyre, Esq. of Eyre Hall, citizens of a neighboring State, who have facilitated the means of obtaining every desirable information with the greatest liberality, and have moreover extended to him that generous hospitality so eminently the characteristic of the people of Virginia.

On the Western Shore of Maryland, the surveys comprehend the banks of the Potomac, from the Eastern Branch to Point Look-out, comprising a portion of Prince George's, nearly the whole of Charles county, and with the examinations on the Patuxent, the greatest portion of St. Mary's county; besides partial examinations of several spots in Prince George's, Anne Arundel, and Harford, referred to in this or the preceding report.

It will thus appear that twelve out of the nineteen counties of the State have been visited, six of which have been thoroughly examined, as far at least as the purposes of the survey appear to require; two are nearly completed; and in the four remaining, examinations that will tend to facilitate ulterior researches have been commenced.

To answer inquiries made from various quarters, and also to remove misapprehensions, as to the duties of the geologist, it may now be stated, that the plan of operations for the ensuing season, pursuant to the provisions of the bill ordering the survey, is to continue the examination of the districts on tide-water, which it is hoped to complete by the end of the next year. Could the undersigned do otherwise than execute literally, and in so far faithfully, the commission entrusted to him, it would give him infinite pleasure to obey calls made for his services in many places where objects of acknowledged interest occur, and mineral resources appear, that would require to be speedily developed; but it is evident that

he cannot take upon himself to swerve from the line of his prescribed duty, unless on the occasion of some great public advantage to be derived thereby, or when the irregularity cannot be the cause of any serious delay. For the purpose, however, of diffusing the benefits anticipated from the survey, and even of gratifying the curiosity of those situated at a distance who believe that they are in possession of objects of value, a public announcement was made that the undersigned would willingly examine, when not in the field, any specimens of minerals, ores, marls, soils, &c. that should be forwarded to him from any part within the limits of the State; and in his absence, directions were given to address the specimens to M. M. Tyson and Fisher, at Baltimore—Mr. Tyson, a gentleman fully conversant with the subject, an experienced chemist and mineralogist, having been employed by the undersigned to communicate any necessary and immediate information that might be required. On this invitation numerous applications have been made, none of which have been wilfully neglected, and the communications relating to them have received as prompt a reply as their nature would allow. The result of some examinations recently, or from time to time, made, and that have not yet been communicated, will be inserted in an appendix to the present report.

Next, in reference to the *State cabinet*, the undersigned has to report, that he has continued to deposit in it the specimens illustrating the geology of the counties that have been traversed, together with such objects as have been received from other parts of the State, and were deemed to possess any interest. But he has not yet found leisure to supply, as required by a resolution of the legislature, the duplicate collections intended to be furnished to the several Colleges and Academies of the State. The intention of this resolution will, it is believed, be better satisfied, by postponing the distribution until the completion of his operations, when entire sets of specimens can be furnished, more apt to excite interest, and consequently more likely to be preserved, than when received in small and detached parcels.

In conclusion, the undersigned cannot conceal from your Excellency that he views with pleasure and pride the probable completion of a work, the projection of which does honor to the State. It is gratifying to find, that wherever he directs his steps, the project meets with the unqualified approbation of his fellow-citizens; and it is no less pleasing to discover that it is approved of by the intelligent abroad as well as at home. Although Maryland has not been the first State to order a geological survey of its territory, it is probably owing to the comprehensiveness of the plan which was first adopted here, and the popular character that it was made to assume in its origin by our legislature, more than to any previous example, that attention has been directed so generally, of late, towards this mode of developing the resources of a country. Since the commencement of our operations, the States of Virginia, New Jersey, and Connecticut, have ordered and commenced surveys of their respective territory, and the strongest recommendations to institute similar operations in Pennsylvania, Ohio,

and New York, have been submitted to the legislatures of these States by their executive officers. Other States will, ere long, doubtless perceive the benefits to be derived from a similar course, and each may be expected to flourish, in proportion as it will afford to its inhabitants the necessary information enabling them to take advantage of the resources that occur within their reach.

But if it be gratifying to know that we have planned well, it would be still more grateful were we permitted to believe that we have executed well. The undersigned believes that some good has resulted from the researches which he was directed to make:—They have been the means of creating new incentives to industry, by pointing out facilities, and indicating resources, that were not previously known to exist; they have elicited inquiry concerning the nature and value of things hitherto neglected; they have enabled the citizens of Maryland to form a better estimate of the value of their possessions, and may have in this way contributed to render them more attached to their native soil; whilst, at the same time, by furnishing a detailed account of the physical geography of the State, exhibiting its natural susceptibilities, they may be expected to invite foreigners to partake of its advantages.—These happy results are already beginning to manifest themselves; and the undersigned has accordingly seen, with deep interest, that inquiries have been made from abroad evincing at least a more correct impression as to the character and resources of certain portions of the State than had been previously formed. The value of property has thus already been enhanced, and must continue to increase with the prosperity and population of the State, whose political importance must, necessarily, likewise be augmented.

The undersigned, therefore, has solely to regret that his abilities may not prove equal to the task of developing in their best light all the resources and advantages possessed by the State. He feels confident, only as regards the earnestness of purpose with which he has pursued his investigations, desirous of leaving nothing undone to render them as widely beneficial as possible, relying upon the liberality of his fellow-citizens and that of the government which they have instituted, to enable him to complete with some credit to himself, with much greater good, it is believed, to them, a work that has already given some promise of usefulness.

It is but justice to add, that whatever zeal the undersigned had brought to the performance of the duties assigned to him, it has been greatly increased by the interest which your Excellency and your Honorable Council have manifested in the success of his operations. If there were not other motives, this alone would have inspired him with those sentiments of profound respect, with which he now has the honor to subscribe himself

Your Excellency's,
Most obt. serv't.

J. T. DUCATEL.

Baltimore, Dec. 29, 1835.

On Tuesday night last, we had quite a snow storm, and in many places on Wednesday morning the snow was nearly an inch in depth.

CULTIVATION OF VEGETABLES.

BROCCOLI.

Sow cape broccoli from the tenth to the twentieth of May, and transplant early in July into ground in the best order and *well manured*. "Set the plants out in rows two feet and a half apart, and two feet distant in the rows. It is seldom the black grub meddles much with plants set out so late in the season as this; but they must be carefully examined every morning, and wherever any are seen cut off, the grub must be hunted and killed, and the vacancy filled up from the seed-bed, in which a few plants should always be left for a reserve. The ground must be kept constantly loose and clean, by frequent hoeings, and towards the end of August, some of them will likely begin to flower. In the beginning of September, more will begin to show; and from the middle of the month, until the middle of November, they produce one continual succession of flowers. The degree of frost they withstand, without sustaining the least injury, when they are in the highest state of flowering, is astonishing; and the most singular and invaluable characteristic of this plant is, the great length of time which is contained, between their first beginning to flower, and their final termination—and that, too, from the same seed, sown at the same time, and the plants all treated precisely in the same manner."

If it is desired to have a succession of the different varieties of broccoli and cauliflower, Bridgeman recommends the erection of a sort of temporary green-houses, made out of rough boards, and the roof partly glazed. In this, with care, the more tender kinds can be carried thro' the winter, and by being planted out early, they will soon be fit for the table.

Broccoli may be secured through part of the winter by taking them up in November, disturbing the roots as little as possible, and laying them in slopingly with their heads towards the north, only a few inches above the ground, and about eighteen inches asunder. By this means the crown of the plant lying low, is soon covered and protected by the snow, which falls previously to long and severe frosts; the plant is also rendered tougher in fibre, and hardier, by the check received in this last removal.

Boil briskly in plenty of water, with a little salt, about fifteen minutes, and eat them with the gravy from the meat or melted butter.

CAULIFLOWER.

This vegetable is extremely delicate, and is esteemed equal to young peas and the Lima bean. However, a great deal depends upon the cooking, and its excellence may be destroyed by an ignorant or careless manner of preparing it for the table. Cut when close and white, and of the middle size; trim off some of the outside leaves; cut the stalk off flat at the bottom, and let it lie in salt and water a little while. Put it into boiling water with a handful of salt in it; have plenty of water, and keep the vessel uncovered; skim the water well; a small cauliflower will take about fifteen minutes, and a large one twenty; take it up as soon as a fork will enter the stem easily, a minute or two longer boiling will spoil it. Eat it with the gravy from the meat, or with melted butter. It is re-

commended by some to boil it in a close linen cloth; but this is liable to injure the color. There is rather an odd receipt given in the Domestic Encyclopædia, but we cannot speak of it from experience. "Let the cauliflower first be parboiled; next they must be immersed in cold hard water, for some time, till they are nearly wanted for the table; then on being boiled for a few minutes, they will become more firm and crisp than if cooked in the usual manner."

We now pass on to the process of cultivation, which ought more naturally to have preceded the culinary development; but as no true horticulturist will reckon his "chickens before they are hatched," this slight deviation from the established order of events, we hope will not lead to any disastrous consequences.

Sow about the middle of September in an open border, and give moderate waterings if the weather be dry. About the end of October transplant into a good frame, after cutting the long tap roots with a sharp knife, and put the plants four inches apart each way. Water gently, put on the lights, and shade them a few days. Before the cold weather sets in, apply a good outside lining of horse dung round the frame; and when it becomes severe, the frame must be covered with boards and salt hay, or bags, or straw mats, sufficient to keep out the frost. Admit air and light freely, to prevent the plants being drawn up weak, at the same time you must be careful not to freeze them. In soft mild days, take off the lights entirely. Towards the middle of March, the weather will probably allow of the frame being fully exposed every day, but run sash on when it storms, and cover the frame at night when frosty. About the tenth of April, prepare the final beds for the plants to flower in, by digging and manuring them well. The ground need not be raked, if it be well broken and dung level, as raking is apt to make it crust over. Water a little before transplanting, if the weather be dry, and raise each plant with a ball of earth, which you must take great care not to break, as it is of great importance to the success of the cauliflower that its growth should not be checked at this period. Plant two feet or two feet and a half apart each way. "Should any of the plants be attacked by the black grub-worm, examine them every morning for ten or twelve days; and when any of them are cut off, search for the worm near the plant, and kill it, as it will be found within two or three inches of the stem, and half an inch below the surface; then replace the plant. If you suffer them to escape, they will gather strength, and quickly destroy a whole planting."—*Wilson*.

CELERY.

Sow about the middle of April, in a rich moist soil; if not rich, make it so by digging in fresh vegetable mould or short well rotted manure. Dig deep, and rake it fine and smooth. Sow the seed liberally all over the surface, and beat the bed evenly and firmly with a clean spade; then sift on a covering of a quarter of an inch of earth, and it will vegetate as soon as cabbage seed. Towards the last of May, set the plants out into a nursery bed, three inches apart, which must be again set out; those for fall use in the first week in July, and those intended to be kept

through the winter, about the last of that month or the beginning of August. To describe the manner of trenching and the subsequent process properly, would require too much space; we therefore refer to Fessenden, or any other book on the kitchen garden.

Celery is a hardy biennial plant, a native of Britain, and known in its wild state by the name of smallage: it is frequently by the side of ditches and near the sea. The whole plant has a rank, coarse taste, and the effects of cultivation in producing from it the mild and sweet stalks of celery, are not a little remarkable. A head of celery was dug up near Manchester, which measured four feet six inches in length. Slices of the root of the celeriac are used in soups, and the Germans use them as a common salad after they have been boiled and become cold: eat them with oil and vinegar.—*Loudon*.

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank, par		VIRGINIA.	
Branch at Baltimore,....do		Farmers Bank of Virginia, 2½	
Other Branches,.....do		Bank of Virginia,.....do	
MARYLAND.		Branch at Fredericksburg,do	
Banks in Baltimore,.... par		Petersburg,..... do	
Hagerstown,.. ¾a		Norfolk,..... do	
Frederick,..... do		Winchester,..... do	
Westminster,..... do		Lynchburg,..... do	
Farmers' Bank of Mary'd,do		Danville,..... do	
Do. payable at Easton,....do		Bank of the Valley,....do	
Salisbury,.... 5 per ct. dis.		Branch at Romney,.... ¾	
Cumberland,..... ¾a		Do. Charlestown,.... do	
Millington,.....do		Do. Leesburg,..... do	
DISTRICT.		Wheeling Banks,..... 1½a2	
Washington, } Banks, ½.		Ohio Banks, generally 2½a3	
Georgetown, }		New Jersey Banks gen. 1½a2	
Alexandria, }		New York City,..... ¾a	
PENNSYLVANIA.		New York State,.... 2½a3	
Philadelphia,..... ¾a		Massachusetts,.... 2a2½	
Chambersburg,..... ¾a		Connecticut,..... 2a2½	
Gettysburg..... do		New Hampshire,.... 2a2½	
Pittsburg,..... 1½a2		Maine,..... 2a2½	
York,..... ¾a		Rhode Island,..... 2a2½	
Other Pennsylvania Bks. 1½a2		North Carolina,.... 2½a3	
Delaware [under \$5].... ¾a4		South Carolina,.... 2½a3	
Do. [over 5]..... ¾a¾		Georgia,..... ¾a3½	
Michigan Banks,..... ¾a		New Orleans..... 4	
Canadian do..... ¾a			

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured...	pound.	15	17
Shoulders,....do.....	"	12	—
Middlings,....do.....	"	13	14
Assorted, country,.....	"	—	13 1/2
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,.....	"	20	22
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old...	each.	4 50	6 00
Cows, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 68	1 75
CHOP RYE,.....	"	—	1 87
EGGS,.....	dozen.	—	12
FISH, Shad, No. 1, Susquehanna,	barrel.	7 75	—
No. 2,.....	"	6 75	—
Herrings, salted, No. 1,.....	"	—	—
Mackerel, No. 2, 9 25;—No. 3	"	—	6 50
Cod, salted,.....	cwt.	3 00	3 25
LARD,.....	pound.	15	—

RUFFLE OATS,

For seed, may be had at the Maryland Agriculture Repository, Light street, Baltimore, by application to mh 22 JAMES MOORE.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,.....	bushel.	1 25	—
CATTLE, on the hoof,.....	100lbs.	8 00	8 75
CORN, yellow,.....	bushel.	83	—
White,.....	"	80	—
COTTON, Virginia,.....	pound.	—	—
North Carolina,.....	"	—	—
Upland,.....	"	18	18 1/4
FEATHERS,.....	pound.	48	—
FLAXSEED,.....	bushel.	—	1 50
FLOUR&MEAL—Best wh. wh't fam.	barrel.	7 75	8 25
Do. do. baker's,.....	"	7 50	8 00
Do. do. Superfine,.....	"	6 87	7 12
SuperHow. st. in good de'd	"	6 81	—
" wagon price,.....	"	6 75	—
City Mills, extra,.....	"	—	7 00
Do.	"	6 87	—
Susquehanna,.....	"	6 75	—
Rye,.....	"	—	—
Kiln-dried Meal, in hhds.	hhd.	—	20 00
do. in bbls.	bbl.	—	4 50
GRASS SEEDS, red Clover,.....	bushel.	—	5 25
Timothy (herds of the north)	"	—	—
Orchard,.....	"	none	—
Tall meadow Oat,.....	"	—	—
Herds, or red top,.....	"	—	—
HAY, in bulk,.....	ton.	18 00	20 00
HEMP, country, dew rotted,.....	pound.	6	7
" water rotted,.....	"	7	8
HOGS, on the hoof,.....	100lb.	9 00	9 25
Slaughtered,.....	"	—	—
HOPS—first sort,.....	pound.	18	—
second,.....	"	16	—
refuse,.....	"	14	—
LIME,.....	bushel.	33	35
MUSTARD SEED, Domestic,.....	"	—	—
OATS,.....	"	44	45
PEAS, red eye,.....	bushel.	—	—
Black eye,.....	"	87	90
Lady,.....	"	—	—
PLASTER PARIS, in the stone,.....	ton.	—	5 00
Ground,.....	barrel.	1 50	—
PALMA CHRISTA BEAN,.....	bushel.	—	—
RAGS,.....	pound.	3	4
RYE,.....	bushel.	92	95
Susquehanna,.....	"	92	—
TOBACCO, crop, common,.....	100 lbs	5 00	5 50
" brown and red,.....	"	5 00	7 00
" fine red,.....	"	7 00	9 00
" wrappery, suitable	"	—	—
for segars,.....	"	5 00	10 00
" yellow and red,.....	"	6 00	8 00
" good yellow,.....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality, ..	"	4 75	5 00
" ground leaf,.....	"	5 00	8 00
Virginia,.....	"	7 00	14 00
Rappahannock,.....	"	—	—
Kentucky,.....	"	8 00	14 00
WHEAT, white,.....	bushel.	1 40	1 50
Red,.....	"	1 30	1 40
WHISKEY, 1st pf. in bbls.....	gallon.	38 1/2	—
" in hhds.....	"	35 1/2	—
" wagon price,.....	"	34	—
WAGON FREIGHTS, to Pittsburgh,.....	100 lbs	2 75	—
To Wheeling,.....	"	3 00	—
WOOL, Prime & Saxon Fleeces,...	pound.	55 to 68	30 32
Full Merino,.....	"	48 55	28 30
Three fourths Merino,.....	"	45 48	26 28
One half do.....	"	40 45	24 26
Common & one fourth Meri.	"	36 40	22 24
Pulled,.....	"	38 40	23 24

CONTENTS OF THIS NUMBER.

Root crops considered in relation to their beneficial effects, and several modes of raising potatoes described—A remedy for the bloody Murrain—Charter of the New Jersey Silk Company—demand and high price of sewing silk—a novel way to grow early potatoes—mode of preventing the ravages of the bee-moth—great product of the Ruta Baga—Conclusion of professor Ducatel's report—Snow Storm—Cultivation of vegetables, as Broccoli, Cauliflower and Celery—Bank note table, prices current, advertisements, &c.

SPENDID DOUBLE DAHLIAS, &c.

WM. PRINCE & SONS, have received five collections of Dahlias from Europe selected from the most celebrated establishments there, and comprising the very elite of all that have been brought into notice there during the last two years. These will be furnished at the most moderate rates. Of the other varieties they have a great stock comprising a great number of choice varieties that are yet sold at high rates elsewhere, but which we now offer at \$3, \$4, and \$5 per dozen, according to the kinds.

Priced Catalogues will be sent to every applicant, and orders for Trees, Plants, or for Garden, Agricultural, and Flower Seeds will receive the utmost attention.

Linnæan Garden & Nurseries, Flushing, near New York. April 12 2t

THE VIRGINIA CORN AND COB CRUSHER AND GRINDER.

THE subscriber having obtained a general privilege (and for certain territory an exclusive right) to make, use, and vend to others to be used, the Patent VIRGINIA CORN AND COB CRUSHER AND GRINDER, which was recently noticed in the Farmer and Gardener, is now manufacturing them, and will be prepared, in a few days to furnish this useful Machine, made in the best style.—Price \$75.

This Machine is constructed principally of cast-iron, is made in the most substantial and durable manner, and is not easily put out of order. With the application of a two horse-power, it is competent to reduce from 15 to 20 bushels of corn and cob to a suitable state to mix with cut straw, corn stalks, hay, or fodder, in an hour; and by hand-power, from 4 to 6 bushels an hour.

Those who have been accustomed to the feeding of stock need not to be told, for they are already aware, that the advantages of such a Machine, on a large estate where many domestic animals are kept, are almost incalculable; and to those who have small establishments it will prove of great value, as, besides saving at least three-fifths of the feed, it will enable them to dispense with the necessity of sending their grain to mill to be chopped.

JAS. MOORE,

Maryland Agricultural Repository, Light st. Baltimore.

mh 22

GARDEN SEED.

THE subscriber has just received his general supply of fresh Garden Seeds from the Messrs. Landreth's of Philadelphia—those for retailing bearing their label adorned warranted. The Messrs. Landreth's grow the most of the seeds they vend, and theirs is the oldest and probably the most extensive establishment in this country, and their seeds have no rival as to quality. Orders from country dealers will be supplied at short notice. Catalogues furnished gratis.

JONATHAN S. EASTMAN.

March 29

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WRITING!!

LADIES and Gentlemen residing in the country, and who may be desirous of improving their hand writing in a short time, are informed that on their visiting Baltimore, if they will call at Mr. Needham's WRITING ACADEMY, No. 146, Market street, between the Museum and St. Paul's street, they can have their writing changed from an awkward, cramped and illegible scrawl, to a beautiful, expeditious and uniform mercantile or epistolary hand in the short space of a few hours for the trifling sum of five dollars. Mr. N. promises to do more in the short time above specified towards eradicating vicious habits than by the ordinary method can be done in twelve years, or forfeit the sum of \$500. The following is a testimonial from several of his pupils in Baltimore:

We the undersigned Pupils of Mr. NEEDHAM, (Merchants and Residents of Baltimore) take this method of publicly expressing our perfect satisfaction of the improvement already made in our Writing, and pronounce him to be equal, if not superior in talents as a Teacher of Penmanship to any one with whom we are acquainted:

Messrs.—James M. Riley—Charles Kettlewell, Jr.—Edward Lea—Joseph Price—George Thompson—Francis Fairbairn—James Somervell—R. S. Harlan—E. Cook, Jr.—John Thomas Wood—James Lord—Thomas R. Brice—William Cooper—Jacob Burnett—Edward Bolton—George Russell.—Misses—Mary Ann Power—Margaret Ross—Georgiana Tilghman—and Mrs. Elizabeth M. Stetson.

March 29



FIELD & GARDEN SEEDS, &c.

WARRANTED GROWTH, 1835.

THE subscriber has just received and is now opening a large and superior assortment of GARDEN and RARE FIELD seeds, growth 1835.

All those seeds which can be raised to advantage in this country, are saved by careful seed raisers at the *Clairmont Seed Gardens*, near this city. Seeds which are found necessary to import are principally from the south of Europe, where they become so well matured, that their vitality is preserved much longer than those obtained from the humid climate of England.

Of the endless variety of Cabbages, Lettuce, Peas, Beans, Cucumbers, &c., none are retained but such as are known to be truly excellent.

The most prominent seeds received, and in store, are 250 bushels Garden Peas of various sorts.

95 bushels Dwarf and Pole Beans.

2000 lbs. Cabbage Seeds. About 35 fine sorts, among which are the Scotch Early York, London Battersea, Flat Dutch, Globe Savoy, Early Harvest, &c.

150 lbs. Cucumber seed, about 12 sorts, among which are Keene's Long Green, Long Green Turkey, &c.

1800 lbs. Radish seeds—principally of Short top Scarlet, Yellow and Red Turnip.

300 lbs. Beet and Mangold wurzel seed.

50 lbs. Green Curled Broccolo, or Scotch Kale, purple curled—blue curled, &c.

35 lbs. Cauliflower and Broccoli—best European sorts.

200 lbs. Carrot seed—for garden and field.

75 lbs. Lettuce seed—the curled Silecia, large white or Lazy, brown Dutch and Malta, are best sorts, the latter particularly fine for forcing.

270 lbs. Onion seed—several French and American sorts.

Also—Tart Rhubarb seed, Tomato, Egg plant, Squash, Black and Orange Salsafy, Spinach, Peppers, Ockra, Flag Leek, Cress, Celery, Endive, &c.

FIELD SEED.

60 bush. English and Italian Rye grass seed.

50 do Green Sward grass, for yards, &c.

1,200 lbs. Scarlet Trefoil or clover, Trifolium Incarnatum.

800 lbs. Lucerne or French clover.

50 bush. English and Poland oats.

250 lbs. Skinless or Huskless oats—new—great product.

150 bush. best English and American Early Potatoes.

100 lbs. Gama Grass seed—this grass bears cutting every 15 days, and of course the product is immense.

50 bush. White and Yellow Field corn.

ROBERT SINCLAIR, Jr. Seedsman, Light st. near Pratt.

IMPROVED DURHAM SHORT-HORN CATTLE.

MR. POWEL'S entire stock of high bred Improved Durham Short Horns, imported or bred by him, will be sold at auction on SATURDAY the 23d of April next, at nine o'clock, A. M. at Powelton, on the Schuylkill opposite to Philadelphia.

Among them are—Ten young Bulls and nine Heifers, principally derived from animals, selected by Mr. Powel in England, in 1831. But one sale having been made for the last two years, the cattle having been reserved for the present sale. mh 29 4t* WM. HUGHS.

FOR SALE ON MODERATE TERMS.

THE editor of the Farmer and Gardener has for sale two most beautiful Devonshire Bulls, rising three years of age each, of pure and celebrated blood. Also, one Bull 4 years old, a cross between a full bred Durham bull and a pure Devon cow. This noble animal combines in a remarkable degree the good points of both breeds. To gentlemen of the south who may desire to improve their stocks of cattle, the present is an opportunity rarely to be met with. All letters to the editor upon the subject must be post paid. ds 29.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 51.

BALTIMORE, MD. APRIL 19, 1836.

Vol. II

THIS publication is the *successor* of the late **AMERICAN FARMER**, and is published at the office, on the *west side of Light, near Pratt street*, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 centsworth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, APRIL 19, 1836.

LARGE YIELD OF CORN.

There was raised the last year on the plantation of Fulton Fleming, Esq. of Virginia, eleven hundred barrels of corn from an eighty acre field, which is nearly fourteen barrels to the acre.

THE SEASON AND YIELD OF CORN.

A letter to us dated Galway, Saratoga county, New York, April 7, 1836, says that "the snow is $2\frac{1}{2}$ feet deep, and the roads impassable."

The same letter in speaking of the yield of the 8 row yellow flint corn, observes, "I have raised rising 120 bushels to the acre planted the 7th of June, although this was late."

VALUE OF THE DURHAM STOCK.

A letter to us from an extensive breeder in Kentucky, says :

"I sold 3 steers of the short-horn breed last month, that were fattened in Fayette and Bourbon counties, for \$625. Two of them were taken to Mobile and sold for \$550."

A PRESENT OF SEEDS.

Our gallant townsman, Capt. J. J. Nicholson, during his present cruise in the Mediterranean, procured a collection of flower and other seeds, and sent them to his valued friend *Hezekiah Niles*, Esq., of this city, with a view of having them distributed. By the latter gentleman we have been designated as the medium of distribution, and we shall now fulfil the trust with becoming emotions of pleasure and pride—pleasure, that by the selection, our subscribers will be benefitted, and pride at being the unsolicited object of an appointment congenial to our feelings, and mingling with its performance, associations which, though we may not mention them, bring unmixed delight to our mind. To behold the brave and generous commander of one of our men of war, far away from the home of himself and family, busily occupied in collecting

seeds of value to beautify the gardens and parterres, and enrich the fields of the land of his birth, is a sight full of moral beauties, and evince more nobility of soul than would a thousand acts of mere bravery, for while the latter are often but the result of physical courage, the former must be received as the unerring evidence of feelings which add lustre to the human character; and this disinterested attention of Capt. Nicholson to the interests and pleasures of his countrymen, will, therefore, not fail to endear him to their affections, and commend him to their esteem.

In the days of ancient republics, the commander of armies was sometime summoned from the plough to lead legions to battle and champion a nation's cause. Deeds so full of glory—so replete with the patriotism that distinguished that heroic and chivalric age, have not been without their historian to transmit them in unfading traces to posterity. Age have succeeded age—nations have risen and fallen, and those republics, which gave birth to the illustrious men, whose love of country we now recall to mind, have shared the fate of most human institutions, and been numbered with the things that have being only in story; but still the brilliant achievements of those who found pleasure from the toils of armies in exchanging the implements of war for those of husbandry, live in the unfading recollection of the world, and though the republics which it was once their pride to serve have been succeeded by monarchies, their examples will continue to preserve in freshness a love of freedom which ultimately must batter down the barriers which power have erected around the institutions of kingly governments, and man, in the dignity of his nature—the fulness of his rights—and the fruition of his hopes, will come forth as the living evidence that he is capable of self-government. But let us turn from the eras of other days and the memory of the men of those times, to the subject under consideration.

We have already explained the motive of Capt. Nicholson, in forward those seeds to the United States, and it may not be amiss to express the deep sense of gratitude we feel towards him for this renewed testimonial he has given of his love of country. The example thus set his brother officers, is worthy of all emulation; and we hope

it may serve to remind them that the splendor of a soldier's arms is not dimmed by occasional devotion to the cause of husbandry: and we seize this occasion to say, that it will at all times, as upon the present one, be a source of pleasure to us to be the medium of transmission between any of the officers of our navy, who may confide to us the trust of distributing to our common countrymen, any seeds which they may collect abroad.

As the lot of seeds sent in by Capt. Nicholson, is not sufficiently large to allow of our giving each of our subscribers a portion, we have added a few sorts at our own expense, which we ask them to accept as the offering of those whose highest ambition it is to render themselves serviceable to the agricultural community.

We have reserved a few of nearly all of the kinds of seeds sent by Capt. Nicholson, with a view of propagating them, and should we be successful, will take pleasure next year in making another and more extensive distribution.

Baltimore, March 30, 1836.

TO EDWARD P. ROBERTS, Esq.

Editor of the Farmer & Gardener :

DEAR SIR: I do not know how so well I can carry into effect the good intentions of my old and valued friend, Capt. *Nicholson*, of the Potomac frigate, (now attached to the Mediterranean squadron,) than by sending a box of seeds, which he transmitted to the United States, to me, into your charge for distribution. Your opportunities are ample for doing good, and your will, I well know, is fully equal to your ability to give it wholesome action.

Yours, truly,

H. NILES.

U. S. SHIP POTOMAC,

Makon, 30th Oct. 1835.

My dear Sir: I send you by my friend Mr. Thornton, purser of the Delaware, a collection of seeds which I promised you. My only regret is, that I have not been able to obtain a greater variety of them, and to forward them to you at an earlier period. The hemp and clover seed are considered peculiarly valuable, and in the distribution of them I hope you will not forget Col. C.

The mortality among the cattle to the eastward, for want of food, should teach a lesson of providence not easily to be forgotten.

ROOT CROPS, &c.

We gave in our last number several methods of cultivating the potato, and endeavored to point out as the policy and interest of farmers to attend more to the cultivation of root crops generally, as being eminently conducive to the comfort of stock of all kinds; promotive of economy in the whole range of farming business, and peculiarly fitted to improve the tilth of land; and it shall be our present purpose to pursue the subject by describing the modes by which those species of root-vegetables which we desire to see cultivated may be successfully grown.

BEETS.

The best soil for beets is a rich sandy loam, but they will grow on any soil if proper care be taken to prepare the ground. Manure well with long stable or compost manure, plough deeply and thoroughly, pulverize the ground by frequent harrowings. Plant *thinly* in drill from 1 to 1½ foot wide; as soon as the plants are about three inches high, thin them out to the distance of about 1 foot apart. The ground must be stirred through the season, kept loose, and no weeds be permitted to choke the growing roots.

They should be planted from about the middle of May till the beginning of June, for a fall crop, and must be taken up early in November. To keep them, after taking them out of the ground, they should have their tops trimmed off and be laid away in a dry state, in a dry cellar where they will be secure from frost. If kept in the dark so much the better. In this way they will keep sound during the entire winter. This root is highly nutritious and is justly esteemed one of the most delicious table roots, besides being one of the best promoters of milk that can be given to the milch cow. In England where the subject is, probably, better understood than any where else, it is universally given by the most distinguished feeders to fattening stock; and, as it is said, with decided advantage, to both hogs and bullocks.

MANGEL WURTZEL.

This excellent root should be sown early in May. The ground should be well manured and prepared as for turnips, and of course well ploughed and harrowed—then lay off drills 2 feet apart, and one inch deep, drop the seed about 18 inches asunder: keep the ground well stirred and clean; and, in all after cultivation throw the furrow or soil from the root.

In July you may begin to strip off the first crop of leaves, which must be carefully pulled, and only such taken off as incline or bend towards

the earth. As soon as the first crop of leaves have been gathered, stir the earth about the root: from 20 to 30 tons of leaves and roots, it is stated on respectable authority, have been produced on one acre of land.

Horses, cows, hogs and indeed all kinds of stock feed kindly on the root and leaves of this vegetable; and what is still better, thrive well: for milch cows there is nothing which can be given them more productive of milk.

RUTA BAGA.

We come now to speak of what in English husbandry stands pre-eminently forward in the catalogue of root-crops—what in fact forms the basis of the system in all the sheep and cattle districts. Through its means England, proper, has within the last century doubled, if not triplicated her stock of domestic animals, and thus added to the wealth of the empire, to that of individuals, extended the comforts and means of living to both man and beast, and given to real property an enhanced value, very far exceeding in amount, all the most sanguine anticipations, which had been previously formed.

The most suitable soil for the Ruta Baga is a rich sandy loam, which should be manured freely with ashes, ploughed deep, and well pulverized. Lay off your rows 27 inches apart; put the seed in with a drilling machine, or if you have not got one, you may very profitably substitute a common black bottle, putting a quill through the cork and mixing dry sand with the seed; sow thin, and when the plants are about 3 or 4 inches high, thin them out to the distance of about 14 inches asunder. As soon as they are of a size to cleanse, pass the plough through them, throwing the furrow from the ball. Their subsequent cultivation will depend upon the season, condition of the soil and necessities of the plant, which must, until the leaves shadow the space between the rows, be kept well stirred and clean: for all working of them after the first ploughing, the cultivator is the most suitable instrument, both on account of the quantity of labor thereby saved, and the peculiar fitness of this implement for all kinds of drill husbandry.

If you have an abundance of manure, you may plough it in broad-cast; but if your supply is scarce, you may apply it in the furrows or drills; upon the top of which you must sow your seed, which should be previously soaked in a solution of chamber-lie, sulphur and saltpetre for 12 hours; then strain the liquid off the seed, immerse them in fish or Seneca oil for an hour or two; strain off the oil, roll them in plaister and sow them.

The time of sowing is not so easy of being fixed. The general rule in Europe, is, to put them in a month earlier than the common turnip; but we question much whether this rule would invariably apply in our country, certainly not in any great extent of district, and we are rather disposed to think that the main cause of the failure of large crops of this root, in many instances, arises from the fact of the sowing being delayed too late.

According to our judgment the sowing in the middle and southern states should not be delayed beyond *June*. In the state of New York and further east, they are frequently sown in the latter part of the month of *May*. They may, however, be sown in the month of *July* and succeed well, if the frost of the fall be long delayed.

One other plan of cultivating them is to turn up two furrows together and sow on the top.

If the ground be well adapted to their growth, be well manured, finely pulverized, and the root itself carefully cultivated, a very large product will without fail be the reward of the husbandman's toil. From five to fourteen hundred bushels have often been raised on an acre.

In England where their value is known and properly appreciated, they are fed to horses as well as hogs and cattle. At first they are given to horses mixed with corn, but afterwards with hay only, the corn being entirely discontinued, and on this food alone, the fact is well established, that horses have been kept at hard work for two months at a time, continuing during the whole period in good health, condition and spirits, competent to the performance of full work, eating the roots with avidity, and even preferring them to corn.

These roots are said to possess the singular property of binding to a healthful extent, instead of relaxing the bowels, and to this characteristic trait, it is ascribed that working horses, oxen and mules, are enabled to labor so advantageously when fed upon them.

Some idea may be formed of the value of these roots, as food for beasts of burden, when it is stated on good authority, that a Mr. Daikin of England, fed fifteen working horses for two months on the product of one acre alone. They possess the quality of rendering the hair of the animal fed on them fine and silky, and are said to cure the disease in horses termed the *grease*.

Besides yielding an immense mass of roots for winter food, they afford a very heavy body of tops, which are peculiarly grateful to stock of all kinds. The best method of securing these tops is

to cut them off, beginning to do so as soon as the early frost begins to set in; feeding them daily to hogs, cows, and indeed to stock of all kinds. The milch-cows eat them with avidity, and when a little salted they are devoured voraciously by the horses.

When the tops are fed off, the roots should be taken up and permitted to lie in the sun until the dirt on handling will fall off, when they may be stowed away in a dry cellar where they will keep, until the month of May, perfectly sound and good.

We noticed last fall a very excellent and judicious farmer throwing a furrow against either side of his Ruta Bagas, with a view of preserving them through the winter; and he assured us they would, thus protected, withstand our severest winters.

We are fully aware that it is hard to divert men from the ways of their fathers—we know that our agricultural brethren are not exempt from that failing which induces us to cling to the customs of our infancy—we know that, from these causes they are slow to enter upon any new branch of husbandry; but may we not hope that self-interest will induce one and all of them to devote at least *one acre* to this culture. Let them be magnanimous enough to make this small essay towards *reform* in their system of culture. So small an innovation upon their old cherished ancestral customs, is certainly not an unreasonable request to make, especially as they themselves are to be the recipients of the benefit to be derived.

CARROTS AND PARSNIPS.

With regard to the soil for these roots, like all others of the root family, they delight in sands, sandy loam, or gravelly soil, and like them too, the ground must be thoroughly manured, ploughed and pulverized. The manure to be used should be well rotted, if obtainable, and if not any other will answer. For field culture twenty-five to thirty double cart-loads of manure will not be found to be too much, and if a portion of it be hog-manure, so much the better. If the land be much moist, water furrows must be thrown up. The rows should be about 12 or 14 inches apart, the plants about 9 inches, which distance must be obtained by thinning out after the plants are a few weeks old. The ground must be kept loose and free from weeds through the summer.

In Guernsey where much pride prevails with respect to *butter*, the cows are almost entirely fed upon parsnips, and it is to their peculiar richness and nutritious qualities, that they ascribe the delightful flavor of that article.

The sooner they are sown the better, and the crop would always be benefitted by having the ground turned up the previous fall to be mellowed by the frosts and snows of winter.

TURNIPS.

The time of sowing and the manner of cultivating this article, are both so well known to every farmer that we shall not attempt to describe either, but will seize the occasion to say that he who would wish to see his stock generally, and his milch cows in particular, do him credit, and to secure full supplies of milk through the winter, should not fail to put in an acre or two for their special benefit; and in order that the fly may not destroy all the young plants, he should soak his seed, and top-dress the plants with ashes and plaster as soon as they are up, say 1 bushel of plaster and 25 of ashes to the acre. This we mean to be independent of the first manuring.

CABBAGES.

This prolific and generous old fashioned vegetable does not find as much favor in our systems of husbandry as it should. Every farmer who has any considerable number of milch cows, should plant a few acres in cabbages to feed them at that period of the summer when the pastures fail to afford full supplies of succulent food, as also to help out the other food through the winter. To attain both these ends on the same ground, it is only necessary to put down a double number of plants, and then cut every alternate one to feed through the latter part of summer, and early part of the fall, leaving the remaining ones for winter food.

CÆSAREAN KALE, OR COW CABBAGE.

The London Horticultural Society thus speak of this vegetable:

"This valuable and rare vegetable though little known in England, will soon rank high, both in cultivation and esteem; there being no species of vegetable resembling this prolific plant. Its peculiar qualities are, that in winter, particularly in severe frosts and deep snows, when other green fodder for cattle cannot be had, this plant from its elevation, (growing to the height of four or five feet,) and its natural hardiness, yields abundant and successive supplies, which is an important desideratum. The mode of using it for cattle is, by cutting off the large leaves as wanted, when a regular succession takes place throughout the winter. Very early in the spring, previously to most other vegetables, it produces vast numbers of most delicious sprouts for the table, equal in sweetness to Asparagus, so that it may be said to produce two crops. Cows fed on the plants

give a greater quantity of milk, and the butter is of a richer flavor than when fed on any other vegetable. A matter also of great utility, is, that of its comforting and cheering qualities in the feeding of ewes in the winter, while suckling lambs."

"It should be sown in a plant bed in May, and transplanted in rows two feet asunder. It is so hardy and so prolific that it will vegetate well in any soil and climate, and prosper even in the shade of fruit trees."

CHAFF AS A MANURE FOR STRAWBERRIES.

We wish that this most delightful fruit were more attended to. The general impression has been, that our's is not the proper climate or soil for its cultivation; but this is evidently an error. We have seen as fine flavored and as large fruit of this kind, growing in our gardens, as any that we have ever met with in a more northern latitude. When properly attended, we know of no fruit which is more profitable. Last season, we planted half an acre of these berries. We picked from the land thus planted one bushel and a half, on an average, per day. The season for picking lasted six weeks, allowing five days to the week, was equal to thirty days. The amount picked therefore was forty-eight bushels for the entire season. These we readily sold at 25 cents per quart, which yielded us the aggregate sum of \$360. This estimate is far from being exaggerated; on the contrary, it will appear much below the mark, when it is taken into consideration, that we used liberally of the fruit for our table, and as presents to our friends.

Our mode of cultivating the plant is this—early in December or January, and in some cases, even as late as February or March, we cover our Strawberries with pine or other straw. This we set fire to, and thus consume all the decayed leaves and suckers of the plant, which may have been left from the last season. Immediately after this operation we cover the bed with a moderate portion of cowpen manure or oak ashes (we prefer the latter if we have it) and over this lay rice chaff two or three inches thick.

The chaff, together with the manure, impart warmth to the land, and cause the plants to spring up much earlier than they otherwise would.—The berries are sooner in market, bear large and longer in season, and are in every other respect superior to those cultivated in the ordinary mode. Besides this, the chaff prevents the suckers from taking root; keeps the rain from filling the fruit with dirt, and throws off the too great operation of the sun from the berries while ripening.

South. Agriculturist.

Importance of Agricultural Improvement.—The improvement of agriculture is ever a matter of the greatest consequence as well to each particular country, as to mankind in general. It is peculiarly important to us as a commercial nation; the support of our trade depending on manufactures; those manufactures on the rate of labor, and the rate of labour in a great degree on the necessities of life.—*Dossie.*

[From the New Orleans Bulletin.]

CULTURE OF THE SUGAR CANE.

There are but four varieties of the sugar cane in Louisiana, viz. the Creole, Otaheite, and two kinds of Ribbon.

The *Creole* is no doubt the cane first carried to Cuba from the Canary Islands. About 35 years ago it was brought here from Havana by Mr. Borce, who had no expectation of making any thing of it but rum, but on being brought to syrup, an experienced sugar maker from St. Domingo perceived that it would make sugar. This cane is yet in most general cultivation, and is found to be rich, juicy and soft—yielding perhaps sugar of the best quality. It ratoons, and gives a much better second year's growth than *Otaheite*. The *Creole* cane is found on exhausted lands not to attain a proper size.

Otaheite cane is a rich juicy cane, but hard and difficult to grind with horse mills. It ratoons badly, does not mature on fresh lands, and from its weight and size of tops is very liable to be thrown down with the ordinary winds.

The kind of *Ribbon* cane most generally cultivated, is characterised by great hardness, by maturing earlier and in fresher soil, than any of our canes, but like *Otaheite*, is large and easily thrown down. Very little, if any difference exists between the two ribbon canes, and the least liable to injury from frost, but it has not probably been sufficiently tested by experience to be relied on.

Cane produces seed in no part of the state of Louisiana. On the sea-board, where it attains nearest to maturity, it only blooms. It is said indeed, not to bear seed even in St. Domingo.

The culture of the cane, like that of most other plants, admits of such a variety of opinions, that it would be difficult to point out any as the best. Being practised by many, the following may safely be relied on by the experienced. The land being well ditched, is well broken up with the plough, from three to four feet apart, and four or five inches deep, in which the plant cane is laid down in double rows, which, being carefully covered with the hoe or plough, is the whole operation of planting. Cane is either planted before the sugar-making season, or as soon after as possible; what is planted in the winter is preserved by being carefully put in beds made by successive layers in such manner, that the tops and blades of each layer covers effectually the preceding one, it is very necessary that the end of every stalk should be made to touch the ground. When the cane comes up, it is worked very much the same way that Indian corn is. In such a climate as this, where it is warring against nature to cultivate this crop at all, it is of great importance to push its early growth by early and careful workings.

ON THE MODE OF MAKING SUGAR.

The mode practised in the State of Louisiana of making sugar, is substantially the same as that used in the West India Islands. The sugar making season may be said to begin about the last of October, and end the middle of January. Very often the crops are severely injured, indeed, almost entirely cut off, by severe frosts, within those periods; it is consequently, of the most urgent necessity, to push the work as rapidly as possible. To effect which, the hands are so divided, as to furnish the requisite labor to each

division of the operation during the day, and regular relieves are established to carry on the work during the night. Cane is cut with a knife made for the purpose. That part only is hauled to the mill which is ripe, and is indicated by the dry leaves. Mills for expressing the juice are composed of three iron cylinders, placed either horizontally or vertically, and worked either by horses or steam. The horizontal steam mills are most approved, and are getting into very general use. From the mill, the juice of the cane passes directly through a trough to a box or receiver, placed near the largest of the kettles; of these the number is four or five, diminishing in size successively from the largest to the smallest, about six inches in diameter and proportionably in depth. The largest kettle is called the *grande*; the next the *flambeau*; the next the *sirop*, and the last the *batterie*—over a furnace placed generally by the side of the wall of the boiling house these kettles are put. Under the *batterie* the fire is made, which passes through a canal leading under the other kettles to the chimney, which is placed by the side of the *grande*. Intense heat and violent boiling being required, as much of the kettle as possible is exposed to the fire. Accordingly they are hung or suspended by their rims in the volume of flame that passes under them with great rapidity, in consequence of the great draft the chimney is designed to produce. The juice is passed from the receiver to the *grande*, where it receives the requisite quantity of lime, in the fixing on which quantity, great experience and attention is necessary, as in it much of the art of sugar-making consists.

Before it reaches the point of ebullition, the heat and lime cause the impurities to rise, which being carefully taken off with a skimmer, leaves the liquor in a state to be passed into the *flambeau*, and from thence, as required, to the *sirop* and *batterie*. As the quantity of lime is graduated by the contents of the *grande*, it should be entirely emptied before fresh juice is put into it. In the *batterie*, the liquor is boiled down to the sugar of chrysalizable point, when it is promptly drawn off into coolers. Much experience is requisite to seize the proper moment of drawing off, as on it greatly depends the quality and quantity of the sugar, and when filled, the sugar remains, till it is cooled to a little above blood heat, when it is put into hogsheads, placed on strong sleepers over the molasses cisterns. With a view to facilitate the escape of the molasses, the joints of the hogsheads are left very open, and three holes are made in the bottom, on which three canes rest on the inside. From forty to fifty-five gallons of molasses are supposed to flow from each hoghead of good sugar. A hoghead is understood to contain a thousand pounds of sugar, yet they not unfrequently have a hundred or two pounds more or less.

A cane crop consists of plants and ratoons, or the growth of the first and second years taken together, the average per acre is perhaps short of a hoghead, in the parish of St. James.

A plantation containing four hundred and fifty acres in cultivation, would have yearly three hundred down in cane, and the balance in corn and peas, supposing the rotation necessary to keep the land in good heart, to be observed. A plantation of such a size would at least require 60 prime

hands to cultivate it properly, and perform the great additional labor of ditching and working on the levee and road; where the levee is bad or large, this force would be insufficient—such a force and plantation would be capable of producing, in years like 1828, three hundred hogsheads of sugar; but in such years as 1829, not more than one hundred could be expected, the medium between the two will not be far from the ordinary crop, of such a plantation and such a force, say two hundred hogsheads. It will probably be a safe mode to ascertain the expense of making any given quantity of sugar, to give a hand credit for what it is seen he can make, and then charge against it all his necessary expenses, and also interest on his own value, and apportionate interest on land and buildings, &c. In the estimate, the hoghead of sugar, with its molasses, is assumed to be worth \$70, which is no doubt rather over the fact. The value of the sugar-house, horses and cattle, &c. is taken to be fifteen thousand dollars, and the land with the supposed quantity of cane, fifteen thousand. It is believed that there is no recent instance of such a property commanding less money. The account may be thus stated:

By 3½ hds. sugar and molasses,	\$223 93
To clothing,	\$12 00
Provisions purchased,	20 00
Doctor,	3 00
Proportion overseer's wages,	14 00
Interest on his value, 10 per ct.	80 00
Proportionate interest, cost sugar house, &c.	25 00
Do. value plantation,	82 50
Risk and deterioration of negro, 50 per cent.	30 00
Cost 3 hds. at \$2	6 00
Tax on negro,	1 00
Sugar maker, 3½,	6 68
	—\$280 16

This statement shows, that charging the ordinary interest on the investment and necessary expenses, there is an excess of \$49.83 over the full value of the product of the hand's labor. Singular as this result may seem to those whose opinion of the profitableness of the cane culture rest on exaggerated reports that are industriously circulated, it is believed to be no less true, than it is illustrative of the fact, that in this and every other business, would present more signal instances of failures, than would be found among those who have attempted cane planting in Louisiana.

Silks—The Editor of the Philadelphia Gazette has received from Dr. Bowring a report recently made by him to the British government on the Silk and Wine trade of France. This report exhibits the immense importance to France of her commerce with us. The total amount of silk manufactures exported from France in 1832 was to the value of twenty-five millions of dollars. Of this amount nearly one half is of green silks, of which "the United States take one-third and in some years nearly half of the whole export." Of figured stuffs and other silk articles we are also the largest purchasers. It may be safely said, then, that France annually exports to the United States, ten millions of dollars worth of silk.

AN EFFICIENT AND ORNAMENTAL LIVE HEDGE.

Our admiration of a hedge in Hampstead, forming part of the enclosure of the late residence of *Dr. Hall*, induces us to extract from the Southern Agriculturist of January 1832, the following account given by that gentleman of the *Tamarix Gallica*, of which the hedge is made. The plant somewhat resembles the cedar at a short distance, but is of a cooler and lighter tint, and more drooping, feathery and graceful in the form and disposition of its limbs and foliage. It grows rapidly; the shoots from cuttings of the last spring being at this time, from three to four feet in height. On plantations along the seaboard, it would give a new and very pleasing feature to the ornamented grounds.

"The *Tamarix Gallica* grows in Carolina with the vigor and luxuriance of an indigenous plant. It is met with in the South of France from fourteen to sixteen feet in height. In our latitude it becomes not only a loftier tree, but attains to greater bulk in the trunk and branches. It is remarkable for its drooping and graceful foliage. It flowers in July and presents to the eye long cylindrical clusters. The corolla and stamens are white or rose coloured. It attracts myriads of bees—is easily propagated by cuttings, and has been to me a matter of some surprise, that recourse has not been had to it for the purpose of a quick set hedge. The cuttings used, are to be taken from the branches of last summer's growth.

I have found them to succeed best when selected of the size of a moderately stout stick and three feet in length. The cuttings to be laid in a straight trench at the distance of two and half feet from each other and buried obliquely half their length. The months of January and February are the most seasonable for planting them. In the course of two years, an excellent and impervious living fence is obtained. The facility with which it is raised in the lower sections of Carolina, must render it of inestimable value to the rice planter. It delights in atmosphere, teaming with saline exhalation. Its leaves are found early in the morning weighed down under masses of dew of a strong briny taste, and presenting a beautiful appearance. The cuttings laid in a trench extended along a raised bank (such as usually encloses land reclaimed from the marsh) would soon exhibit a dense and impenetrable thicket. It here vegetates with peculiar facility, and revels in a soil most congenial to its nature. When it has reached the height of four feet, it should be carefully plashed by nicking or cutting half through the different branches on their upper sides. They are thus made with a very little pressure, to fall in any requisite position. The smaller lateral twigs may be so plashed as to close all the lower vacancies and thicken every part regularly through. The *Tamarix* requires regular pruning once a year. It is easily confined to any defined height by the use of the saw, the labour necessary to accomplish this object being inconsiderable. It may not be improper here to mention, that the fibres of the root become in time so intimately and minutely blended with the soil, constitute no trifling addition to the strength and durability of the bank. The tides frequently overflow it without the least injury to the vegetable health of the hedge; or detaching from the

soil which inundations would otherwise sweep away.

The preceding observations derive much strength from what is known of the *Tamarix* in other climates. European writers inform us that it is found on the exposed coast of England, especially towards the sea; in the north of Africa along the Mediterranean, and in most situations on the shores of Greece. It is supposed to have been introduced by the monks from the coast of Normandy into Cornwall, and thence its cultivation was extended to other parts of England. I have thus far endeavored to render worthy of notice, a brief sketch of the natural character and cultivation of the *Tamarix Gallica*, with a view to its employment as a hedge; my experience of its advantages has not exceeded the success of an experiment confined to a small extent of land, but sufficient reliance may be placed on the conclusions it teaches, to invite the exertions of the agriculturist on a scale more commensurate with the utility it promises to secure him."—*Charleston Mercury*.

LABOR-SAVING MACHINES.

An important subject to farmers, is that of labor-saving implements and machines. There is one great advantage in these, which is generally overlooked. By enabling the farmer to despatch his business, his work is more completely under his control, and he is enabled to guard against loss or damage which might be the consequence of more protracted operations. Thus for instance, in using the horse rake, he is not only enabled to accomplish the same work with one quarter of the expense he would otherwise have to employ; but by enabling him to perform it so much more expeditiously, he can take advantage of the weather, and have many acres of hay upon the ground without the danger of having it spoiled by rain: as the speed with which he may collect it with a horse rake, enables him to anticipate the approach of wet weather. Thus, independently of the immediate amount of labor it saves, it prevents the troublesome operation of drying wet hay, after it has once before become fit for the mow or stack. Again, by the use of the planting or drilling machine, one man is enabled to do the work of several; this is one item of saving; but in addition to this, it very often happens that a crop may be planted with it during a favorable season, and while the ground is in the best possible condition; while, without it, the work might be protracted till the ground is rendered unfit by heavy rains; and a loss of many bushels to the acre sometimes arises from crops being planted out of season.

A vast amount of labor might be saved by employing a moderate share of thought and contrivance in constructing or procuring, and arranging, some of the simpler and more common kinds of labor-saving machinery. Threshing machines have become very common, and many are connected with a portable horse power, which may be separated from the machine and applied to other purposes. This may be easily, and it sometimes is, attached to a circular saw, (the cost of which is comparatively small,) and the expensive and laborious operation of sawing wood by hand, is rendered expeditious and easy. It may also, with a little contrivance, be made to work a straw

cutting machine, a turnip and potato slicer, a corn sheller and other similar machines, which are commonly worked by hand; and this may be frequently done while it is driving a threshing machine, or performing other work. We have known a fanning mill to be connected with it, and worked by it, the threshing machine being situated on a floor above, so that the wheat fell directly from it into the hopper of the fanning mill, and passed out ready for market. We have also heard of a pair of burr-stones placed in a barn, which could be driven by the power of a thrashing machine, and used for grinding food for domestic animals. By a little attention and thinking, numberless similar conveniences may be devised. Improvements of this kind should not however be adopted, until calculation has proved that from the amount of labor they will be required to perform, the ultimate saving will more than counterbalance the immediate cost.—*Germantown Telegraph*.

CULTIVATION OF THE DAHLIA.

This flower has lately been called the Georgiana, but without good reason, as there is no other called the dahlia. It is a native of Mexico, but has been brought to such perfection in England, that it is more indebted to that country than to the land of its birth. The climate of the United States is strikingly congenial to its habits, and it grows with great luxuriance: the difference existing in that particular, between growing here and in England, is very remarkable. In a respectable English catalogue, the height of the *Alexandrina victoria* is stated to be three feet; while in this country one of the same flower have often exceeded twelve feet. If there is no error in the English statement, the difference appears to be almost incredible. It has become quite fashionable, its many fine qualities and striking beauties having brought it into deserved estimation. When the weather gets warm, about the end of April and beginning of May, you will observe the young shoots which have forced their way through the old stem which is left with the root; split this down, so that a shoot may remain with each piece. Plant in a rich soil in the borders three feet apart, or in clumps, selecting a variety of colors, and placing the tallest growing kinds in the centre. Put the root two inches below the surface, and if it has but one good eye it will make a prettier plant than when it has more. After it has grown about three feet, take some day when the ground has been softened by rain, and drive in a stout stick, from six to ten feet long, about eighteen inches into the ground, near each plant; but take care not to let it be so close as to injure it; or the sticks may be put in at the time of planting. Let the stick be made from 1½ inch plank, planed smooth, with a pointed and notched head, and painted green. The branches of the dahlia are extremely brittle; and if your garden is exposed to the sweeping winds which often occur in the fall, you must tie every branch very carefully to the stick; this will always be the safest plan; otherwise the expectations of a year may be laid prostrate in an instant. Sometimes a few forward buds will open their premature beauties to the burning beams of a July or August sun, but their lustre is quickly dimmed. The latter end of September, some seasons all

October, and sometimes part of November, witness the dahlia in all its glory. The brilliancy of the flowers may be preserved for several days, by shading them. Some of the kinds are inconceivably splendid, and no flower exhibits such a variety of all that is rich and magnificent in colours. What a pity it is, that with all its desirable properties, it should be so tender. The frost operates upon it like a pestilence, and when that has taken place, the stem must be cut off two or three inches from the ground, and after a few days the root taken up and exposed to dry for some time, then cover it well in *dry sand*, and put it away in the cellar to remain through the winter. A few very dwarf kinds may be planted in pots; but generally they look unsightly, and do not thrive so well as in the open ground.

THE HESSIAN FLY.

Extract of a letter from *Charles Gale, Esq.* of Milton, (Pa.):

"While I am writing to you on business I may as well communicate to you my experience of from 15 to twenty years, respecting the 'Hessian Fly', which, previous to that period, had frequently proved very destructive to my wheat crop. Close observation showed me that it almost invariably attacked early sown wheat in the latter part of autumn, and after experience also proved, that wheat sown late, was equally liable to destruction by the ravages of that insect, in the following spring. I then adopted a middle course; sowing my wheat, if possible, between the 27th of September and the 8th of October, and have never suffered \$10 loss by the Hessian Fly since I adopted that course. I however am convinced that my crop now in the ground is materially injured by the insect, in consequence of the very warm and unseasonable weather that we had last October and part of November. This, however, is one of those exceptions that will sometimes occur in general rules; the effects thereof cannot be guarded against."

NOVEL METHOD OF RAISING CUCUMBERS.

After all that Gulliver and Doctors have said against cucumbers, they are still a welcome dish upon most tables, and when eaten in moderation are probably healthful. That they are not so when eaten immoderately is, we have no doubt, also true. Cucumbers are most sought after early in the season, and we have picked up our pen to tell how we managed last year to have them in perfection long before they were plentiful in market.

Having cleared the soil to the depth of 12 or 15 inches from a space 4 feet in diameter, we placed an old nail keg in the centre, and filled up around with fresh manure, and covered it over with 6 or 8 inches of earth, forming a mound of a foot or more in height, and six feet in diameter, with the open ended, empty keg in the centre, into which in very dry weather we could pour water which would escape into the manure through the openings, and prevent the perishing of the vines. The seed were planted on the mound, (not in the keg, for that was empty,) in March, or in April; and the heat of the fermenting manure forced them up vigorously. We had heavy frost

afterwards, and the surface of the earth was completely frozen but it was only necessary to lay a board over the plants, and the warmth below was amply sufficient to protect them. The only object in using the keg, was to prevent the water from running off and forming gutters down the side of the mound. The plan worked well, and as it is now about time to renew the experiment, we publish it that others also may enjoy the advantages. A frame for the vines to run upon is advantageous.—*Germantown Tel.*

SUGAR FROM BEETS.

Some time since, a few public spirited gentlemen of our city, impressed with a belief that something remained yet to be done for the improvement of land, near the city, projected a plan of cultivating *beets*, with a view of extracting therefrom "sugar." In order to a proper commencement of the project, they employed a person competent to the undertaking, to proceed to France, and there obtain a thorough knowledge of the best manner of promoting the growth of the beet, of procuring thence the saccharine properties with which that vegetable abounds. We have before us now, a piece of sugar purchased in the South of France, at nine and a half cents per pound, which is in every respect equal to the best loaf sugar, in appearance and taste. This is part of a large quantity obtained from beets, and will serve to show that the plan is feasible, if the sugar can be obtained at a sufficiently low price, in a country where labor is high—that can only be known by fair experiment. It is the wish of the gentlemen referred to, that the experiment should be tried. Those who are willing to aid the interests of the middle states, or who would have good sugar, from free labour, should lend a hand to the experiment, and contribute towards the expense.—*U. S. Gazette.*

The Manufacture of Silk.—We have had occasion heretofore to speak of the success with which the power loom had been applied by Mr. Gay, to the weaving of silk. But the only experiments which had then been made, had been made upon an old and very awkward constructed cotton loom. Within the last three weeks, one of the new looms with improvements by Mr. Gay, adapted to the manufacture of silk, has been put in operation upon a piece of fine white Pongee Handkerchiefs, three quarters wide. This loom has put at rest all doubt that might before have been entertained in relation to the practicability of weaving silk in this manner. We have several times made the observation, by marking the piece with a pencil, and the loom has woven an inch and a half of this fabric in one minute. Others have at different times witnessed the operation of the loom, and their observation of the result has been precisely the same. The speed regulated at one hundred and forty strokes of the lathe per minute, and the fabric which it turns off is in no manner inferior to the improved article. The girl who attends it is an experienced cotton weaver, and one of the smartest in the country. She affirms that she can without difficulty tend to four of them, and turn off one hundred yards of goods per day. What will Louis Phillippe say to that?—*Providence Journal.*

ON A METHOD OF PREVENTING THE ATTACK OF CATERPILLARS.

At the season of the year, says Mr. Brown, of Pinefield, when caterpillars generally attack fruit trees and bushes, the following method of preventing their attacks may not prove undeserving of notice. Let a hole be bored in the stem of a tree as far in as the heart in a direction sloping downwards about a foot from the ground. Into this hole pour a little mercury. Close up the hole with a peg, not very tightly fitted in. Cut the top of the peg smooth, with the bark of the tree or bush, and then put a little tar in it to prevent water getting in the hole. This I have found a sure and safe method of not only preventing attacks of caterpillars, but of driving them off the tree, and it is not yet I believe publicly known.—*Quar. of Agriculture.*

The Tomato.—A writer under the signature of *Medicus*, in a New York paper, is putting in a word in time for the Tomato, so that farmers and gardeners may have a plentiful supply for the next season. From its ascertained wholesomeness, he says, the demand for it was doubled last year of what it ever was before, and he anticipates a similar increase the coming season. A gentleman near New York cleared, he states, eighteen hundred dollars last summer on a small farm by rearing the Tomato.

KENTUCKY LIVE STOCK EXPORTS.

Mr. James Renfro, who resides at Cumberland Ford, (Ky.) has furnished the editors of the Lexington Observer, with the following statement of the quantity and value of live stock, which has been driven from various parts of Kentucky, across the Ford to the southern markets, during the past year:

Horses	4716	prob. val. in market,	} \$533,860
Mules	1951	mules included,	
Stall'd Beef	2486	do do do	104,370
Shoats	2887	do do do	18,000
Sheep	1320	do do do	5,280
Hogs	60,187	do do do	1,037,802
			\$1,699,812

To preserve Corn from the depredations of Moles.—Pulverize 1 lb. of copperas, dissolve it in as much water as will cover 2½ bushels of corn—let the corn remain in it 24 hours, and the Moles will never touch it.

CONTENTS OF THIS NUMBER.

Large yield of corn—the season and great yield of late corn—value of Durham bullocks—a present of seed from Capt. J. J. Nicholson of the U. S. Navy—root crops, &c., their mode of culture and value—chaff as a manure for strawberries—importance of agricultural improvement—culture of the sugar cane—consumption of French silks—valuable plant for live hedge—value of labor saving machines—cultivation of the Dahlia—the Hessian fly and a preventive—novel method of raising early cucumbers—sugar from beets—the manufacture of silk in Providence, R. Island—mercury preventive of caterpillars—the tomato culture—Kentucky live stock exports—copperas soak for corn—advertisements, prices current, &c.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,.....	bushel.	1 25	—
CATTLE, on the hoof,.....	100lbs.	8 00	8 75
CORN, yellow,.....	bushel.	80	85
White,.....	"	80	85
COTTON, Virginia,.....	pound.	—	—
North Carolina,.....	"	—	—
Upland,.....	"	18	18½
FEATHERS,.....	pound.	48	—
FLAXSEED,.....	bushel.	—	1 50
FLOUR & MEAL—Best wh. wh't fam.	barrel.	7 75	8 25
Do. do. baker's,.....	"	7 50	8 00
Do. do. Superfine,.....	"	6 87	7 12
SuperHow. st. in good de'd	"	6 81	—
" " wagon price,.....	"	6 75	—
City Mills, extra,.....	"	—	7 00
Do. " " " " " " " " " "	"	6 87	—
Susquehanna,.....	"	6 75	—
Rye,.....	"	—	—
Kiln-dried Meal, in hhds.	hhd.	—	20 00
do. in bbls.	bbl.	—	4 50
GRASS SEEDS, red Clover,.....	bushel.	—	5 25
Timothy (herds of the north)	"	—	—
Orchard,.....	"	none	—
Tall meadow Oat,.....	"	—	—
Herds, or red top,.....	"	—	—
HAY, in bulk,.....	ton.	18 00	20 00
HEMP, country, dew rotted,.....	pound.	6	7
" " water rotted,.....	"	7	8
Hoes, on the hoof,.....	100lb.	9 00	9 25
Slaughtered,.....	"	—	—
HOPS—first sort,.....	pound.	18	—
second,.....	"	16	—
refuse,.....	"	14	—
LIME,.....	bushel.	33	35
MUSTARD SEED, Domestic,.....	"	—	—
OATS,.....	"	44	45
PEAS, red eye,.....	bushel.	—	—
Black eye,.....	"	87	90
Lady,.....	"	—	—
PLASTER PARIS, in the stone,.....	ton.	4 50	5 00
Ground,.....	barrel.	1 50	—
PALMA CHRISTA BEAN,.....	bushel.	—	—
RAGS,.....	pound.	3	4
RYE,.....	bushel.	92	95
Susquehanna,.....	"	92	—
TOBACCO, crop, common,.....	100 lbs	5 00	5 50
" brown and red,.....	"	5 00	7 00
" fine red,.....	"	7 00	9 00
" wrappery, suitable	"	—	—
for segars,.....	"	5 00	10 00
" yellow and red,.....	"	6 00	8 00
" good yellow,.....	"	8 00	12 00
" fine yellow,.....	"	12 00	16 00
Seconds, as in quality,.....	"	4 75	5 00
" ground leaf,.....	"	5 00	8 00
Virginia,.....	"	7 00	14 00
Rappahannock,.....	"	—	—
Kentucky,.....	"	8 00	14 00
WHEAT, white,.....	bushel.	1 38	1 45
Red,.....	"	1 30	1 38
WHISKEY, 1st pf. in bbls.	gallon.	38½	—
" in hhds.	"	35½	—
" wagon price,.....	"	34	—
WAGON FREIGHTS, to Pittsburgh,.....	100 lbs	2 75	—
To Wheeling,.....	"	3 00	—
WOOL, Prime & Saxon Fleeces,...	pound.	55 to 63	30 32
Full Merino,.....	"	48 55	28 30
Three fourths Merino,.....	"	45 48	26 28
One half do.....	"	40 45	24 26
Common & one fourth Meri.	"	36 40	22 24
Pulled,.....	"	38 40	23 24

A GARDENER.

A person possessing a general knowledge of gardening in all its branches, and of farming, is desirous of obtaining a situation in the above capacity. He can give the best recommendation as to character and capacity. Address applications to W. B. through the editor of this paper. All applications by letter to be post paid.

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BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured....	pound.	15	17
Shoulders,.... do.....	"	12	—
Middlings,.... do.....	"	13	14
Assorted, country,.....	"	—	13½
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,.....	"	20	22
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old....	each.	4 50	6 00
COWS, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 75	1 81
CHOP RYE,.....	"	—	1 87
EGGS,.....	dozen.	—	12
FISH, Shad, No. 1, Susquehanna,	barrel.	7 75	—
No. 2,.....	"	6 75	—
Herrings, salted, No. 1,.....	"	—	—
Mackerel, No. 2, 9 25;—No. 3	"	—	6 50
Cod, salted,.....	cwt.	3 00	3 25
LARD,.....	pound.	15	—

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

U. S. Bank,.....	par
Branch at Baltimore,.....	do
Other Branches,.....	do
MARYLAND.	
Banks in Baltimore,.....	par
Hagerstown,.....	¾a
Frederick,.....	do
Westminster,.....	do
Farmers' Bank of Mary'd, do	do
Do. payable at Easton,.....	do
Salisbury,.... 5 per ct. dis.	do
Cumberland,.....	¾a
Millington,.....	do
DISTRICT.	
Washington,.....	2½a
Georgetown,.....	¾a
Alexandria,.....	¾a
PENNSYLVANIA.	
Philadelphia,.....	¾a
Chambersburg,.....	¾a
Gettysburg,.....	do
Pittsburg,.....	2a2½
York,.....	2a2½
Other Pennsylvania Bks. 1½a2	do
Delaware [under \$5].....	3a4
Do. [over 5].....	2a2½
Michigan Banks,.....	5a
Canadian do.....	5a
VIRGINIA.	
Farmers Bank of Virginia 1½a2	do
Bank of Virginia,.....	do
Branch at Fredericksburg do	do
Petersburg,.....	do
Norfolk,.....	do
Winchester,.....	do
Lynchburg,.....	do
Danville,.....	do
Bank of the Valley,.....	do
Branch at Romney,.....	¾
Do. Charlestown,.....	do
Do. Leesburg,.....	do
Wheeling Banks,.....	2½a
Ohio Banks, generally.....	3a4
New Jersey Banks gen. 1½a2	do
New York City,.....	¾a
New York State,.....	2½a3
Massachusetts,.....	2a2½
Connecticut,.....	2a2½
New Hampshire,.....	2a2½
Maine,.....	2a2½
Rhode Island,.....	2a2½
North Carolina,.....	2½a3
South Carolina,.....	2½a3
Georgia,.....	3a3½
New Orleans,.....	5

CHINESE MULBERRY SEED, TREES, &c.

25,000 TREES, of the Morus Multicaulis or Chinese Mulberry, can yet be supplied, and 50,000 Cuttings, ready prepared for planting, with ample directions for their management and culture.

The Trees raised from cuttings the last year, and managed according to these directions, attained the height of 5 to 6 1-2 feet, although the season was unpropitious. Genuine SEED, in paper parcels, at \$5 each, which can be sent per mail if desired.

Orders for Trees, Cuttings or Seed, must contain a remittance by draft or otherwise, or refer to a house in New York, that will become responsible for the payment in two or three months.

Fruit and Ornamental Trees, Greenhouse Plants, Bulbous Roots, and herbaceous Plants of every kind.

Of the splendid double Dahlias, the collection comprises all the most rare and exquisite varieties, recently brought to notice in Europe; the prices are very moderate, say from \$3, 4 1-2, 6, and \$10 per dozen, and they are packed and shipped in the most careful manner.

Of Garden, Field and Flower Seeds, the assortment is the most extensive in America, and embraces a great number of choice new varieties, never before offered to the public, as will be seen by reference to the catalogues.

Priced catalogues will be sent to every applicant, and a liberal discount and credit is allowed to vendors.

WM. PRINCE & SONS,

Lin. Bot. Garden & Nurseries, near New York.

ap 19

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IMPORTED STOCK FOR SALE.

THE EDITOR of the *Farmer & Gardener*, Baltimore, is authorised to sell the following valuable animals imported in November last into this country by their present owner, whose opportunities of obtaining the very best stock in the British Empire, is a guarantee of the superior excellence of the animals now offered for sale.

One improved short horn Durham BULL, calved March 24, 1834; he was got by Col. Craddock's Buckingham, dam by Scipio, g. d. by Old Stephen.

Scipio and Stephen were the property of Mr. CHARGE, one of the most eminent breeders in Durham.

Stephen was directly descended from Comet, which was sold for 1600 guineas. Old Buckingham won the Barnard Castle prize in Durham, and was got by Ephygum, dam by Young Rockingham, g. d. by Wonder. Ephygum was by Old Rockingham, and won a premium in Manchester.

His owner writes of him that "he is a majestic animal, and stands as the Durham breeders say in broad cloth; he is two years old, and is such an animal as would baffle any attempt to put a price upon him: his docility, admirable symmetry and perfection entitle him to rank as a pure short horn bull of the first class—he cannot be surpassed."

His price is \$1,200.

A beautiful fashionable roan full blooded improved short horn Durham COW, just rising three years old, of great size and beauty of form; she was got by Architect, dam by Rob Roy, g. d. Thornton's George, g. g. d. Burdon.

Architect was got by Highflyer, dam by Lady Brough. Highflyer was sold to Capt. Davis, at Mr. Mason's sale, (of Chilton, England,) for 210 guineas.

The price of this Cow is \$500.

An Ayrshire COW, imported from Ayrshire, Scotland, is remarkable alike for the richness and quantity of her milk. Her cream is so butteraceous as to require but from 16 to 18 strokes of the churn to convert it into butter. Her price is \$300.

All letters upon the subject of their purchase to the editor must be post paid. ap 19 lt

A DURHAM BULL FOR SALE.

THE Editor of the *Farmer and Gardener* has for sale, the thorough bred improved short-horn Durham bull *Superior*—he is a beautiful roan, was bred by Stephen Williams, Esquire, of Northampton, Massachusetts, and was calved July, 1831.

Superior was got by Frederick, dam Yellow Rose by Young Denton, (963)

g. d. Arabella (imported) by North Star (460)

g. g. d. Aurora, by Comet (155)

g. g. g. d. do by Henry

g. g. g. g. d. by Danby, (949)

Frederick was got by Wye Comet

Dam Tulip by Young Denton (963)

g. d. Tube Rose 2d (imported)

g. g. d. Tube Rose

g. g. g. d. Tulip Comet (157)

g. g. g. g. d. Cherry by Ladeone.

Arabella and Young Denton were sent out by Samuel Williams, the American banker in London, to his brother in Massachusetts to improve the cattle of this country, and, says our informant, never did a man hit more luckily; for the stock from young Denton have not only proved of fine size and form, but deep milkers.

Superior has two crosses per Denton, and is a very square, compact built animal, straight on the back and legs, broad on the loin and hips, chest deep and broad, short and small in the leg, rather heavy in the head and neck. So far he has proved a sure and good stock getter. \$50 have been refused for his calves by native cows. His price deliverable in Baltimore is \$300.

Also, a Hampshire Down Buck, 7 years old—price \$100—and

A South Down Buck, 1 year old this spring—price \$50.

All letters upon the subject of the purchase of either of these animals, must be post paid. ap 19

POTATO OATS.

100 Bushels seed potato oats—a choice article—for sale by JAMES MOORE,

Light, near Pratt st.

Mh 22 at the Maryland Agricultural Repository

RUFFLE OATS.

For seed, may be had at the Maryland Agricultural Repository, Light street, Baltimore, by application to mh 22 JAMES MOORE.

A SPLENDID HERD OF STOCK FOR SALE.

THE editor of the *Farmer and Gardener*, has been appointed Agent for the sale of one of the largest herds of improved Cattle, Durham, Alderney, &c. to be found in the country. They are the property of a deceased person's estate, and, therefore, applications should be made early. Among them are,

2 full blooded improved short horn Durham Cows, 7 years old each, with calves
 3 do do do do do 9 years old
 3 do do do do do 20 do
 3 do do do do do 4 do in calf
 3 do do do do do 3 do do
 1 do do do do do 8 years old

15 full blooded improved short horn Durham Cows

3 full blooded improved short horn Durham Heifers, 1 year old each

2 do do do do Bulls, 3 years old each
 1 do do do do do 8 do

3 full blooded improved short-horn Durham Bulls

1 half blooded do do do do 9 years old
 1 do do do do do 7 do

2 half blooded do

2 half blooded Durham Heifers, 1 year old

1 full blooded Holland Cow, 10 years old

1 do Alderney, 17 years old

3 half blooded Devonshire Cows, one 2 years old, the other two 15 years old each.

Any person or companies wishing to purchase any portion of the above stock, will please address the editor of this paper. Pedigrees will be furnished. All letters upon the subject must be post paid. ap 19

H. B. BROOKE,

COMMISSION AGENT, 75 Pratt, 2 doors below Howard street, offers his services to his friends and the public generally for the sale and purchase of Produce and Goods of every kind and description.

For sale as above, a fine assortment of pure and genuine Garden Seed, from the celebrated establishment of Messrs. Prince & Sons, of Flushing, Long Island; and as their agent, will thankfully receive and forward with despatch orders for any of their superior Field and Grass Seeds, Garden and Flower Seeds, splendid Dahlias, Bulbous and Tuberous Roots, Trees, Plants, Vines, Evergreens, Shrubby, &c.

Daily expected, an assortment of beautiful Dahlias. ap 19 4t

WRITING!!

LADIES and Gentlemen residing in the country, and who may be desirous of improving their hand writing in a short time, are informed that on their visiting Baltimore, if they will call at Mr. Needham's WRITING ACADEMY, No. 146, Market street, between the Museum and St. Paul's street, they can have their writing changed from an awkward, cramped and illegible scrawl, to a beautiful, expeditious and uniform mercantile or epistolary hand in the short space of a few hours for the trifling sum of five dollars. Mr. N. promises to do more in the short time above specified towards eradicating vicious habits than by the ordinary method can be done in twelve years, or forfeit the sum of \$500. The following is a testimonial from several of his pupils in Baltimore:

We the undersigned Pupils of Mr. NEEDHAM, (Merchants and Residents of Baltimore) take this method of publicly expressing our perfect satisfaction of the improvement already made in our Writing, and pronounce him to be equal, if not superior in talents as a Teacher of Penmanship to any one with whom we are acquainted:

Messrs.—James M. Riley—Charles Kettlewell, Jr.—Edward Lea—Joseph Price—George Thompson—Francis Fairbairn—James Somervell—R. S. Harlan—E. Cook, Jr.—John Thomas Wood—James Lord—Thomas R. Brice—William Cooper—Jacob Burnett—Edward Bolton—George Russell—Misses—Mary Ann Power—Margaret Ross—Georgiana Tilghman—and Mrs. Elizabeth M. Stetson. March 29

GAME CHICKENS.

FOR SALE, five dollars a pair, Game Fowls, warranted to be of genuine strain. Apply to the editor. ap 5

AGRICULTURAL IMPLEMENTS, GRASS SEEDS, &c.

JAMES MOORE, successor of Sinclair & Moore, Light street near Pratt, tenders his thanks to the agricultural community, for the liberal patronage heretofore afforded to the Maryland Agricultural Repository, and respectfully invites the attention of farmers and others, to his stock of articles now on hand, comprising a large assortment of PLOUGHS of the most approved patterns, both wrought and cast shears, and of sizes adapted to all the purposes of agriculture—also Hill side and double mould board ploughs.

Corn cultivators of different kinds, those with five wrought tines generally preferred: Harrows of different shapes and sizes.

Corn shellers, the usefulness of which has been fully attested, and the increased sales of the last year, together with the many impressions of their utility, by those who use them, give evidence of their excellence—price \$20. Subject to a discount of 5 per cent for cash payment.—Price from \$15 to \$30. Improved Wheat Fans, of different sizes.

Cylindrical Straw cutters, a superior article for cutting any kind of long forage, 20 inch boxes adapted to horse power, \$75—extra knives per set \$6. 14 inch box adapted to manual power \$45—extra knives \$5 per set. 11 inch box which has some recent improvements \$30—extra knives, \$3 per set. Common dutch straw cutters from \$5 to \$7.50.

Garden and Field Tools, such as spades, shovels, hedge shears, mattocks, grubbing hoes, pruning tools, and hoes in a variety of forms, &c. Cast steel axes, warranted, Wove wire for screens, fans, cellar windows, safes, &c. Cotton Gins made to order—Grain Cradles—Harvest tools in their season.

Machines for sowing clover seed, which distribute the seed with regularity over a space of 12 feet at a time.

Having an Iron Foundry attached to this establishment extra castings for ploughs of all kinds, Threshing machines, Horse powers, Mill work, window weights, &c. can be furnished or made to order of the best quality and at moderate prices.

FIELD SEEDS.

Orchard grass, Herds grass, Tall meadow oat grass.—Timothy and Clover; also on hand a lot of Ruffie oats.—Buckwheat, Millet, Potato Oats, &c.

Retail sales mostly confined to town acceptances, or to cash for which a discount will be made on implements. March 8th.

FARMERS' REPOSITORY.

No. 36 W. Pratt-street, Baltimore, Jan. 25, 1830.

THE proprietor avails himself again of the commencement of a New Year, to express his grateful thanks to his numerous friends and customers for their kind and liberal support of his Agricultural Establishment, and is happy to say that his ceaseless exertions to accommodate the public, have not been without a corresponding encouragement from them, and with his present Improvements and Machinery, he is able to manufacture his Agricultural Implements much better than formerly, and with greater facility, and hopes to merit continued patronage. He now presents to the public an article new in its construction, for grinding corn and cob for feeding horses and stock. To those who approve this mode of feeding, this machine is worthy their attention. Also, Corn Shellers to be worked by hand or horse-power. He has a variety of Straw Cutters; but his own patented Cylindrical Straw Cutter is not surpassed by any other implement of the kind in existence; he has recently made some improvements in their construction, which adds to their cost, and for which he has been obliged to add a trifling advance on the price of the small size:—his prices for them being as follows, viz:

11 inch Revolving Bottoms	\$30, with extra pair of knives.	\$33
11 " Permanent Bottom	23, do do do	31
13 " Permanent Bottom	43, do do do	48
13 " Revolving Bottom	45, do do do	50
15 " Revolving Bottom	50, do do do	56
20 " Large size fitted for horse-power	80, do do	90

His variety of Ploughs embraces almost every description and size that are worthy of notice, from a small seed Plough to the large rail road Plough—Gideon Davis' Improved Ploughs in all their variety, with cast and wrought shares; these castings are now made on his own premises, of the best stock and with special care; a supply of them

always on hand to sell separate from the ploughs when required. Ox Scrapers for levelling hills, &c.; common and patent Wheat Fans; Fox & Borland's spring concave Thrashing Machines, large and small size, and portable horse powers for the latter; also one of Z. Booth's 2 horse Thrashing Machines and stationary horse power for the same; Brown's vertical patent Wool Spinners, and Watson's patent Washing Machine, both very simple and useful machines for families; Harrows; double and single corn and tobacco Cultivators; superior grain Cradles; and a great variety of other farming implements of a prime quality, and all on reasonable terms, at wholesale and retail.

Likewise in store—Orchard Grass, Timothy, and Herds Grass Seed of superior quality.

mh 22—eo2m

JONATHAN S. EASTMAN.



FIELD & GARDEN SEEDS, &c.

WARRANTED GROWTH, 1835.

THE subscriber has just received and is now opening a large and superior assortment of GARDEN and RARE FIELD seeds, growth 1835.

All those seeds which can be raised to advantage in this country, are saved by careful seed raisers at the *Clairmont Seed Gardens*, near this city. Seeds which are found necessary to import are principally from the south of Europe, where they become so well matured, that their vitality is preserved much longer than those obtained from the humid climate of England.

Of the endless variety of Cabbages, Lettuce, Peas, Beans, Cucumbers, &c., none are retained but such as are known to be truly excellent.

The most prominent seeds received, and in store, are 250 bushels Garden Peas of various sorts. 95 bushels Dwarf and Pole Beans.

2000 lbs. Cabbage Seeds. About 35 fine sorts, among which are the Scotch Early York, London Battersea, Flat Dutch, Globe Savoy, Early Harvest, &c.

150 lbs. Cucumber seed, about 12 sorts, among which are Keene's Long Green, Long Green Turkey, &c.

1800 lbs. Radish seeds—principally of Short top Scarlet, Yellow and Red Turnip.

300 lbs. Beet and Mangel wurzel seed. 50 lbs. Green Curled Borecole, or Scotch Kale, purple curled—blue curled, &c.

35 lbs. Cauliflower and Brocoli—best European sorts. 200 lbs. Carrot seed—for garden and field.

75 lbs. Lettuce seed—the curled Silecia, large white or Lazy, brown Dutch and Malta, are best sorts, the latter particularly fine for forcing.

270 lbs. Onion seed—several French and American sorts.

Also—Tart Rhubarb seed, Tomato, Egg plant, Squash, Black and Orange Salsafy, Spinach, Peppers, Ockra, Flag Leek, Cress, Celery, Endive, &c.

FIELD SEED.

60 bush. English and Italian Rye grass seed. 50 do Green Sward grass, for yards, &c.

1,200 lbs. Scarlet Trefoil or clover, *Trifolium incarnatum*. 800 lbs. Lucerne or French clover.

50 bush. English and Poland oats. 250 lbs. Skinless or Huskless oats—new—great product.

150 bush. best English and American Early Potatoes. 100 lbs. Gama Grass seed—this grass bears cutting every 15 days, and of course the product is immense.

50 bush. White and Yellow Field corn.

ROBERT SINCLAIR, Jr. Seedsman,
Light st. near Pratt.

GAMA GRASS ROOTS.

5000 Gama Grass roots will be received, and for sale about the 20th of March. By obtaining roots of this valuable grass, farmers will gain the advantage of two years over seed plantation.

March 1

ROBT. SINCLAIR.

THE FARMER & GARDENER.

PUBLISHED EVERY TUESDAY BY THE PROPRIETORS, SINCLAIR & MOORE, AND ROBERT SINCLAIR, JR.—EDITED BY E. P. ROBERTS.

No. 52.

BALTIMORE, MD. APRIL 26, 1836.

Vol. II

THIS publication is the successor of the late **AMERICAN FARMER**, and is published at the office, on the west side of Light, near Pratt street, at FIVE DOLLARS per annum, payable in advance. All subscribers who pay in advance, will be entitled to 50 cents worth of any kinds of seeds, which will be delivered, or sent, to their order.

American Farmer Establishment.

BALTIMORE: TUESDAY, APRIL 26, 1836.

GREAT YIELD OF RUTA BAGA.

Mr. John Mager of Steuben county, New York, raised the last season on less than half an acre of ground on the river flats, 1,100 bushels of Ruta Baga, some of them weighing $17\frac{1}{2}$ lbs. with the tops.

NEW VARIETY OF WHEAT.

The editor of the *New England Farmer* has received a specimen of *Spring wheat*, raised on the farm of the Hon. D. Wilder, Leominster, Massachusetts, which was imported some years since from Odessa. It appears, says the editor of the N. E. Farmer, to be a valuable variety, and weighs 62 lbs. to the bushel.

The legislature of Maine passed an act at its late session, giving a bounty of five cents per pound on cocoons, and fifty cents per pound on every pound of reeled silk raised in that State.

The present number completes the second volume of our journal, and as it is just one year since its management came into our hands, the occasion seems to be a fit one for presenting to our patrons the homage of our unfeigned acknowledgements. In entering upon our editorial duties we were not without our misgivings that we should often be embarrassed with the conviction, that the relation of a learner would suit us better than that of a teacher; but we felt buoyed up by other and more animating convictions—we felt that we brought to the discharge of our duties, a passionate devotion to the cause of agriculture and the interests of the tillers of the earth—and a tolerable acquaintance with the theories of the various authors who had written on the science of husbandry. With these prerequisites, knowing that whenever we should be in doubt, we could appeal to our senior proprietor with a certainty of having it solved, we fearlessly entered upon our vocation, and in looking back upon our

course during the year that has just closed, we feel that, however much we may have lacked in knowledge, we have nothing to charge ourselves with on the score of want of zeal; and we can say it without indulging in a spirit of vain boasting, that our course has been continually cheered since the commencement of our labors, by a progressive increase of our patrons: nor have we been without cause of gratulation, in witnessing the unsought friendship of some of our distant subscribers in efforts to add to our list. We mention this in a spirit of gratitude; for if there be one thing which more than any thing else, brings delight to the human heart, it is the consciousness of having rendered one's labors acceptable to those for whose benefit they may have been performed.—And what stronger evidence could we ask than the interest manifested in our welfare to which we have just alluded. We could name individuals who, without solicitation, had canvassed for, and sent us from five to ten additional subscribers.—Besides the pecuniary advantage resulting to our establishment from such generous conduct, the testimonial of approbation which it bears upon its frontlet, overwhelms us with the profoundest emotions of thankfulness, and while we shall cherish those acts and their actors in fond recollection, they will stimulate us to renewed exertions, and arm us with fresh energies, the coming year, to fulfil the important trust confided to us.

Before we conclude this brief allusion to ourselves, we would fain offer to each and all of our readers, the hope that their labors the present season may be crowned with success, and that liberal prices will reward them for their toils.

The spring though unpropitious thus far to those engaged in agricultural pursuits, appears to us to have commenced with the most brilliant prospects to merchants. We do not recollect any season for thirty years, when we have seen so many indications of activity with the commercial community of Baltimore. Every medium of intercommunication with the west, southwest and south, have been more than taken up ever since the first opening of the navigation. As an instance of this fact, we will relate a circumstance which will go far to show the correctness of our remark. On the 7th of this month we received a consignment of 14 Bakewell sheep from our es-

teemed friend Mr. John Barney, for three gentlemen in Virginia, and anticipating difficulty in getting a conveyance by the steamboat to Fredericksburg, we thought we would make assurance doubly sure, and accordingly on Friday the 8th inst. waited upon the commander of the Rappahannock, to take passage for the sheep for the following Sunday morning. In our way to the boat we had to find our course through a train of drays so large as to render the task a difficult one—Light street, Pratt street, both east and west of Light street, for at least a hundred and fifty feet were crowded with drays loaded with goods, much of which were returned to the places whence they came, being unable to find a transit on board the steamboat Rappahannock; our sheep sharing the same fate. To meet the public demand the proprietors of the steamboat Norfolk, put her on the Fredericksburg line for a few trips; and we applied in this quarter for conveyance for them; but it was not until her second trip that we could succeed. Though we were disappointed, we found a source of pleasure in the cause of it; for however grating it may be to us to be foiled in our wishes, we are often more than repaid by the pleasure which we derive from the reflection that it is the occasion of benefit to others.

We have learned that such is the press for transportation on the Baltimore and Ohio Rail Road, that if that company had three times its present number of cars, they could find active employment for the whole of them.

MANAGEMENT OF HORSES.

The feeding of horses is a thing which for the most part is indifferently attended to in this country, and indeed the system of feeding which has been adopted, is but ill calculated to preserve these noble animals in full health and unimpaired strength and vigor of body. With many planters and farmers, nothing but corn and oats, in the whole grain, are doled out from one end of the year to the other. Now these are each highly nutritious and excellent substances, and well calculated to sustain horses under long continued and laborious work, but then are they not both too heating to the blood, and too difficult of digestion to be given without change during the whole year? Would it not be better, putting the

saving out of the question, to reduce those grains to something like digestible substances. Whether the horse be fed upon corn or oats, in the whole grains, they necessarily void a large portion of them in precisely the same state in which they are received into his stomach. This fact is too well established to be denied at this late day, and hence it follows that all portions of grains which are eaten by the horse and not digested, serve but to irritate the coat of his stomach, inflame his blood, and, by necessary consequence, disease the whole system. The health of a man's family is very properly said to be dependent as much upon his cook as upon any other earthly agent, whether referrible to physical or atmospheric causes. Writers upon human health invariably recommend plainness of diet, moderation of eating, exercise, and general temperance, and the substances which are most earnestly commended to favor, are those which afford the most bland nutrition, and which are easiest of conversion into chyle. If these recommendations hold good with respect to human diet, we would ask, are not the same general laws of nature applicable to the horse? If man lives luxuriantly and feeds upon high seasoned and luscious food, the chances are as ten to one against him that he will get the *gout*, or some inflammatory disease; and if he feeds upon substances difficult of digestion, he is just as sure to be visited with that worse than pestilent-distemper—the dyspepsia. Ah! but would you compare the horse to man? we think we hear some one ask; and lest our motives may be mistaken, we will take the liberty of replying to the query in advance of its being solemnly put to us. We do not compare the horse to the man, but we hold it as of a truth which admits not of contradiction,—that all alimentary substances, to be profitable to the stomach of either man or horse, should be not only nutritious and bland, but should be eaten in that state in which it is best calculated to undergo the digestive process. Mastication does much to prepare the food of the horse for that operation; but the evidences which are afforded by the substances voided by this animal, incontestibly show that it fails most lamentably in the performance of this highly necessary work. In England where the management of stock generally, and particularly of the horse, is reduced to a matter of science, but few intelligent feeders think of giving food to that animal in an uncrushed state; nor do they confine them to grain-feeding alone, and for the assigned reason, that it is too *heating*. Potatoes and Ruta Baga form a part of the feed of the studs of most English

country gentlemen; by which means they keep their horses in better health; the occasional feeding with roots serving to open their bowels, cool their blood, determine the secretions to the surface, render the skin loose, and the hair silky and healthy. We have said that independently of the saving which is thus effected, the other reasons are sufficient to justify a resort to the practice, and we would ask are not the melioration with the animal to which we have just alluded, sufficient of itself, to make it an object worthy of every consideration? We think it is, and should be rejoiced to find that our suggestions were improved upon by American horse owners, for we honestly believe that infinite good both to master and beast would inevitably result from it.

STRAWBERRIES.

The following method of cultivating this delicious fruit is practised with great success by Mr. Noyes Darling, of New Haven, Connecticut. Its simplicity will recommend it to all common sense horticulturists.

“The mode of cultivating which I have found most successful, is to transplant early in the spring, (every spring) parting the bunches into as small portions as practicable, leaving a small root upon each portion. A bunch will furnish about twenty roots. These are set, if in a border for edging, six inches apart—if in a bed, ten inches apart. They are hoed sufficiently to keep down the weeds, and require no other care except watering in dry weather.

The soil should be rather poor. A good coat of *fresh horse manure*, containing a good deal of litter, should be dug in, so as to be *buried about five inches under the surface*. Unfermented manure, with a mixture of straw, thus buried, appears to yield the best supply of food in the latter part of the season, when the plants most require it.”

[From the New England Farmer.]

INDIAN CORN.

T. G. FESSENDEN, Esq.

Dear Sir—In December, 1834, you published in the N. E. Farmer a communication from me, concerning a species of Indian corn, which I had planted the preceding season, the seed of which I had procured of Judge Buel. Its chief commendation in my estimation, resulted from the fact, that it came to maturity about a fortnight earlier than any kind of field corn which the farmers in my neighborhood were accustomed to plant; thus anticipating the early autumnal frosts, and enabling me to sow my corn land in wheat in tolerable good time. I expressed the opinion, that it had been as productive as any other corn

which I had ever planted; but as I had tried it but once, I did not feel so confident of its productiveness, as to commend it on that account. I have planted the same kind of corn the past season, and no other; and the result has fully equalled my expectations. I was able to gather my corn leisurely and finished sowing my corn and potato ground by the 3d of October. In other seasons, with a different species of corn, I was always hurried, and was seldom able to finish sowing wheat till after the middle of October, and in some seasons, not until after the 20th. Wheat sown so late is more liable to blast, and is more exposed to be winter killed, than that which is sown earlier, and has opportunity to get well rooted before the ground freezes up. Late sown wheat will sometimes produce a fair crop, but success is so uncertain, that it should be avoided when practicable.

I have taken some pains the past season to ascertain the productiveness of this corn, with some degree of accuracy. In order to try the experiment, I selected a piece of ground, which by actual measurement, contains one acre and twelve rods. This ground was planted the preceding year, about one half of it with potatoes, the other half with corn. This selection was made not from choice, because I do not approve of planting the same ground for two successive years, and more especially with same kind of crop. The result of this experiment showed evidently that it is bad husbandry to plant the same ground twice in succession with the same crop—for the corn in that part of the piece, where corn grew the preceding year, was not so well eared, nor were the ears so large, as on that part which had been planted with potatoes.

In the beginning of May, twelve loads of coarse manure from the barn yard, were spread upon the land, it was then well covered under a furrow of five or six inches deep. Eight loads of fine manure, composed chiefly of earth that had been deposited in a low spot in the yard the preceding summer, were then spread upon the land, when it was harrowed with a light seed harrow, till the surface of the ground was pulverized and the fine manure was mixed, and partly covered with earth. The ground was planted on the 13th of May, in rows of three and a half feet asunder, with a space of two feet between the hills. The seed was soaked about 12 hours in warm water; mixed with plaster, planted five kernels in a hill, and at the first hoeing thinned out, so as to leave but three stalks in each hill. The corn was hoed three times, and the last hoeing was performed early, about the 25th of June, some days before the corn began to show its tassels. I have long been of the opinion, that cutting or disturbing the fibrous roots just before the corn is setting for ears, is injurious to the crop, as it impairs its capacity of imbibing nourishment at a time when it is most essential.

The cultivator was used at each hoeing, and the old practice of hilling up the corn at the first hoeing, was dispensed with. The stalks were cut early in September, but not until they had generally begun to change their color, nor until many of them were fully ripe. The corn was not picked until the 30th September, and be-

tween that and 5th of October was husked out and cribbed. From this acre and twelve rods of land, were gathered two hundred and seventeen bushels of ears of good sound corn, making two hundred and twenty four bushels in the whole. Had I anticipated so large a product I would have preserved and thrashed it by itself, in order to ascertain the exact quantity of shelled corn. But a part of it was husked and mixed with other corn before my curiosity to know the quantity had been excited. From the experiments which I have made, I am satisfied that there was at the time of husking, about half as many bushels of corn as there were of ears.

My crop suffered a considerable diminution from two causes. A little before the time for the first hoeing, I found that my neighbor's poultry had been very busy in the field, and had actually scratched and pulled up at least one-fourth of the piece. This had to be planted over the second time, and was much less productive than the first planting.

While the corn was in the milk, a violent gust of wind passed over the field, and laid the whole of it almost prostrate. Many stalks were broken off and never rose again. But for these two causes there would have been a considerable increase in the product, and an almost total abstraction of the poor corn. The green and mouldy ears were wholly attributable to these causes, and without them the poor corn would scarcely have exceeded one per cent.

I am, very respectfully, yours, &c.

SAMUEL LATHROP.

West Springfield, Jan. 1, 1836.

SUCCESSFUL FARMING.

We ask the attention of our readers to the following communication of Mr. BEMENT, of Albany. It ought certainly to convince those who ridicule the idea of deriving instruction from *agricultural publications*, that they are not without their use and value. They must certainly admit, that even a *printer*, with the aid of *agricultural papers*, good sense, and proper care, can at least "make the two ends meet," which is as much as many do who have enjoyed the superior advantages of a long apprenticeship to agricultural labor—and which they seem to think renders further instruction unnecessary—where, in truth, they are then only just prepared to learn by *reading, reflection, and experiment*.

The "lessons of the grandfather" should be learned and practised upon by every farmer in the country.

Mr. Bement is always ready and pleased to exhibit his stock of cattle, sheep, and hogs, to those who take an interest in such animals, and also to explain his mode of farming; and he enjoys superior advantages for *demonstrating* the excellence of the productions of his farm, in serving them up, in superior style, at his Hotel in State street, to those who are so fortunate as to make his house their home while in Albany.

[From the New York Farmer.]

SUCCESSFUL FARMING.

Mr. Minor—Sir,—In my letter to you of January 27th, 1835, I said, "my farming operations had necessarily been very limited," &c. &c.—

Another season has passed, and I embrace a few leisure moments to give you some account of my success on the same farm; not, however, in the way of boasting, but to show you that I have not been unsuccessful. The farm consists of 110 acres, and put down in the tax-book second and third-rate land—80 acres in cultivation, and the remainder wood, of which I only had the privilege of cutting for fencing. Rent four hundred dollars per annum.

It was considered by many as a very high rent, a very hazardous undertaking, and that I never should get enough off to pay rent and meet expenses; which, in fact, was the case the first year, as I was minus two hundred and thirty dollars. I could, however, account for it, in repairing and altering the stables for my cattle, building pig-stye, digging well, draining, repairing, and making new fences, drawing manure from the city,—the benefits of which I received the next year. Of my success you can form an opinion from the statement below. For certain reasons I have withheld the nett proceeds. Suffice to say, I have made up the deficit, and added to my capital.

I am a mere novice in farming—I am by profession a printer—it is a new business to me—I have much to learn, and for what little I do know, I am indebted to agricultural publications, and to lessons derived from Mr. Buel, and other eminent farmers, who I am proud to number among my acquaintance.

The question is often asked me, "Where did you imbibe your notions and taste for farming?" My answer is, "When a boy, eight or nine years of age, I used to 'ride horse' for my grandfather, to plough corn; and if, perchance, I should allow 'old Dobbin' to tread upon a bill of corn, look out for a lump of earth at the urchin's head!" He is now dead and gone—but the lessons he taught me are still fresh in my memory. He was a good farmer—he had a time for every thing, and every thing must be done in time—a place for every thing, and every thing in its place. His fences were always in good order—his buildings in good repair. His stock fed regularly, and at regular hours; not feeding to surfeit one day, and half starving them the next. In short, he had a system, and followed it strictly—and *made money by farming too!!* His pork-barrel and granary were never empty. He never ran up accounts with the merchants, nor run in debt because his credit was good. He lived to a good old age: and died, as he lived—an honest man. Peace to his ashes.

On looking over my sales-book, I find the following articles passed to the credit of the farm:

Cattle, consisting of 1 cow and 7 calves, (Durham short horn),	\$825 00
Sheep, consisting of bucks, ewes, and lambs, for breeding,	615 00
Pigs, principally for breeders,	276 00
Milk sold, besides feeding the calves,	157 80
Pasturing cattle and horses, exclusive of my own stock,	136 18
Potatoes sold for family use,	615 69
Ruta Baga turnips, 387 bushels, at 20 cents per bushel,	97 40
Barley, 100 bushels, at 80 cents,	80 00
Millett, including the straw, which I think equal to hay,	71 00

Buckwheat, 24 bushels, at 50 cents,	12 00
Oats, 150 bushels, at 50 cents,	75 00
Hay, 12 tons, at \$17½ per ton,	210 00

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In the above I have made no account of what remains on hand, nor of what was consumed on the farm. My potato crop was a good one, amounting to over 2300 bushels, and all of the choicest kinds, for table use, and which are less prolific than the more common sort. My hay crop was not as good as the year previous; and I was not alone in that, for very few of the best cultivated farms in this county gave over half a crop.

In July last, I purchased of S. Hawes, Esq., a farm, consisting of 184 acres of land, formerly the property of Judge Spencer, lying 3½ miles west of this city, where, should my life and health be spared, my future efforts will be directed, principally in rearing superior animals for sale—such as cattle, sheep, and swine; and hope, by unremitted care and attention, to deserve a share of public patronage. My cattle are of the pure "Improved Durham Short Horned" breed; sheep of the "South and Hampshire Down," "New Leicester," and pure "Merino breed; swine of the "Improved Berkshire," "Improved China,"—some females of the "Mackey" and "Mocho," which I am crossing with my Berkshire and China. I have also made arrangement to procure the "Bedford," and it is my intention to procure the best breeds our country affords, so that I can test their peculiar and individual qualities, by comparison and demonstration; keeping each breed pure, as well as experimenting by crossing with the different varieties.

No animal on the farm has been more generally neglected than the hog, and it is my opinion, no animal will pay better, with proper care and attention to breed, for the expense incurred. But they require care and attention, which farmers and laborers are too apt to neglect.

Fearing I may trespass too much on your time, as well as that of your readers, I will conclude, by promising you, should it be agreeable, an account of my success in cultivating the Ruta Baga.

Very respectfully,

yours, &c. &c.

CALEB N. BEMENT.

Bement's Hotel, Albany, March, 1836.

[From the New York Cultivator.]

CORN, CARROT, AND RUTA BAGA CROPS.

Mr. BUEL—Dear sir—Being unwilling to hide my light under a bushel, however humble it may be, when thousands of others are shining so bright around me, illuminating my path and rendering my labors more easy, more productive, and more pleasant, I have taken the liberty of forwarding for your disposal, an account of my past season's agricultural labors, so far as they are connected with the cultivation of the corn, the carrot and the ruta бага crops.

Under the influence of a strong disposition to innovate upon old theories and practices, and to mark out a new and untrodden path, where there appears to be room for improvement; with no reverence for usages whose merits are founded upon mere antiquity, I have commenced the agri-

cultural life, prepared to think and to act for myself. With such a disposition, and knowing, as every man of reflection must know, that there is a great degree of ignorance on agricultural science in our country, you may well imagine that I see many things among our hard working and deservng farmers, that most emphatically require a thorough and radical change—that there is a vast amount of labor, of hard, back-aching labor, which from improper application, produces not its suitable reward—and that there are many acres of fine productive soil, which by improper management are not made to yield a return of simple interest upon their cost.

I will acquaint you with my experiment upon the cultivation of a field of corn, of three and one-third acres. The land was of the kind here denominated the oak timbered land; a strong, loam soil with a clay bottom. It had been three years down after wheat, without seeding, and had been previously worked pretty close. In May I carted on about thirty loads of rotted manure upon two acres of the poorest part of the land, and the rest was without manure. I then ploughed it very carefully, being particular to turn the sward *all* under. I then dragged it twice with the harrow across the furrows, and then with a hand-marker having seven trails, I marked out for the rows, three feet six inches one way, by one foot nine inches the other. The ground by this time had, owing to the drought, become very dry. It was now the 19th of May; I had intended to have planted by the 12th, by which I should have avoided the bad effects of the drought.

I soaked my corn, and rolled it in plaster; it was of the twelve rowed kind; I put from five to eight kernels in a hill, and covered with moist earth. The corn came up unevenly, some not till three or four weeks after planting. On the 2d June, I put on thirty-five bushels per acre of leached ashes. On the 11th, ploughed out the corn with the cultivator, and hoed, throwing a little fresh earth around each hill, first thinning it out to four of the best spears in each hill. It came forward now very fast. On the 23d, went through the second time with the cultivator, but owing to a press of other business, did not hoe it. July 2d, used the cultivator the third time, and hoed the second, throwing little fresh earth in each hill. This was all the labor bestowed in the tillage of the corn; it now presented a most healthy and thriving appearance, and almost completely shaded the ground. At this period my neighbors began to prophecy the result of my experiment, and with no very flattering terms.—Without a single exception, they told me I would have but little corn, and that that little would be poor, as it grew too thick, and was too much shaded. With this array of prophetic judgment, from old and young, against me, I almost began to doubt the wisdom of my experiment, and to repent having wandered from the footsteps of my fathers. Some advised me to cut out every other row, but as I had begun the experiment, I thought it proper to carry it through. The corn grew rapidly, grew strong, and maintained its healthy color. On the 3rd of October, after an unusually cold and unfavorable season, with frost every month, and one particularly on the fourth of August, which materially injured the corn crop,

and one on the 16th September, which put a stop to its growth, I cut up my corn by the roots and stouted it off the field, and left it till the 10th of November, when I completed the husking, and stored into my grainery three hundred and twenty-two bushels of ears of good corn, besides sixty of soft or pig corn: being at the rate of about 50 bushels of corn per acre. Besides the corn, I had double the usual quantity of stalks, which in this season of scarcity, I have found very valuable.

I will now inform you of the carrot crop. Early in the spring I carted eight loads of long manure on to one eighth of an acre of tolerable rich bottom land, deep and loose, and ploughed it under; and on the 12th of May put the seed in the ground by hand, in drills 14 inches apart. The seed did not come up well, there being frequent vacancies of from one to ten feet in length. In the course of the season the carrots were hoed twice and wed three times by hand. On the 29th October I harvested the crop, which turned out two hundred and ten bushels of carrots, at the rate of 1680 bushels per acre. The whole cost of tillage and harvesting was \$14, including interest on land at \$50 per acre; the value of crop at two shillings per bushel, \$52.50, from which deducting cost, leaves a balance of \$38.50 nett gain from one-eighth of an acre. I have no doubt that had the seed come up uniformly over the field, I should have had 250 bushels, which would have been 2000 bushels per acre.

Adjoining the carrot field, and of the same kind of land, and prepared in the same way, I had one tenth of an acre devoted to the culture of the ruta бага. The ground was made perfectly level, and on the 26th June the seed was sown in drills from eighteen to twenty inches apart, and came up well, as the weather was very favorable. On the first hoeing they were thinned to twelve inches apart. They were hoed but twice; and on the 12th November I harvested one hundred and twenty-two bushels; being at the rate of 1,220 bushels per acre. Value of crop at 18 pence per bushel, \$22.87; tillage and harvesting, \$6.20, leaving a balance of \$16.62 nett gain from one-tenth of an acre.

With regard to the carrots, they were not thinned, but left to grow as they came from the seed; but the looseness of the soil allowed them to spread, and they grew to a very great size: some measuring 17½ inches in circumference, by 30 inches in length, weighing 7½ lbs. The largest turnip measured 25 inches in circumference, and weighed 11 lbs; very few weighing less than 5 and 6.

I would respectfully solicit the attention of your correspondent, Thomas Midford, to the account of ruta бага culture, as exhibiting the result of the level system, which he considers the least enlightened and the least productive.

Respectfully yours,

EDWARD MILLER.

[From the New York Cultivator.]

SINGULAR APPLICATION OF GRAFTING.

New Paltz, Nov. 3, 1834.

Sir:—I have a very valuable apple tree which had the bark eaten off a few inches above the ground by mice, in the winter, and I took the following method to save the tree. I took four

small twigs from another tree, and engrafted them below the wound, in the manner of side grafting, and loosening the bark above, bent the twigs and split them under the bark until they came parallel with the body, then covered them well by banking the dirt above the wound and grafts. I left the earth around one season, then cleared it away, and found two had taken. These have commenced to form new bodies, and the tree, from all appearances, is as thrifty as ever, and the twigs have grown in two years to the bigness of your thumb.

I am, dear sir, your humble servant,

ABRAHAM STEEN.

[From the Farmer's Register.]

EFFECTS OF BLACKSMITHS' CINDERS AS MANURE.

In the course of almost every farmer's agricultural experience, things are brought before his mind by circumstances which if properly investigated, might be useful to the public. Such matters generally die with the discoverer, and some of them, perhaps, re-discovered an hundred times before they become fully the property of the public. Agricultural societies and journals often save from oblivion, valuable facts and opinions which might otherwise be lost. If each one who thinks he has observed any thing worthy of preservation, would lay it before some society, or the editor of some well conducted journal, we might occasionally obtain information capable of extensive application in matters thought by the original observer to be contracted in their nature. This formal introduction is not designed by the writer as a prelude to the announcement of any important discovery of his own—it is rather intended to elicit from others information, which diffidence may have led them to withhold, and as an apology for troubling you, sir, with a matter whose importance the writer does not feel capable of deciding.

Some twelve or fifteen years ago—the exact period is forgotten—I spread upon a small piece of land, perhaps about two acres a large pile of cinders, which had long been accumulating, at the end of an old smith's shop. At the time this was done, the chief benefit was expected from some remains of sulphurous matter, which might be in the material, as much pit coal had been burned in the shop. I also hoped that simply blackening the soil would improve its products by enabling it to absorb more heat. The next crop was fine, and it has continued to produce wonderfully ever since. For the last ten years, though very slightly cultivated, it has yielded a good crop of corn, except one year, when it brought a fine crop of oats. I do not recollect that I ever put on it any manure, besides the cinders, and I hardly suppose that the tenants, who have occupied it for the last nine years, have burdened it with manure. Indeed, I do not know that they have manured it at all. This little lot is considerably exhausted by scouring treatment: but I do not know, in this vicinity, a piece of high land of the same size, to which, if moderately manured, I would sooner trust for a fine crop of any kind.

I have felt much at a loss to account for the cause of this increase of fertility from the use of blacksmith's cinders. Since learning a little

more, however, of the chemistry of agriculture, from your writings, and from other sources, I begin to suspect that I have learned the secret.—Blacksmiths, while heating their iron and steel, use sand largely, by throwing it on the fire and dipping the metal to be operated on in beds of it, to prevent oxydation. There is some potash also, probably, formed from the ashes of the coal exposed to extreme heat. Thus we have materials for the formation of the silicate of iron and potash, which seems to be the acting manure in the famous Jersey marl. Of course, if this notion be correct, every blacksmith, while forming tools wherewith to work the land, is unconsciously preparing a most excellent material for its improvement.

It is true, that no great surface of land could be manured by shop cinders, if those from every shop in the state were carefully used. But in agriculture, small matters are not to be despised. Enriching a few acres in every neighborhood, throughout the country, by means heretofore neglected, is certainly a matter worthy of attention. But besides the cinders from smith shops, a vast amount of a similar material may be found in the scoriæ from the various kinds of iron works in the country. These, probably, would be more valuable than ordinary shop cinders, inasmuch as a great deal of lime is used as a flux in iron works. I have an intelligent and public spirited friend, largely engaged in iron works, whose attention, I can almost pledge to testing the value of such scoriæ as manure, should you think this matter worthy of notice in the Register. It should perhaps be noticed, that as the materials alluded to above, belong to the class of stimulating manures, of course, need some aid from those which are nutritious.

W. S. MORTON.

SHEEP HUSBANDRY.

We take the following observations on sheep husbandry from Silliman's Journal, 1824. It is contained in a "Notice of an excursion among the White Mountains of New Hampshire, &c. with miscellaneous remarks by James Pierce."

"From their elevation and latitude, the grazing lands situated in the northern part of New England, are best adapted for sheep. The great consumption of fodder incident to long winters, so objectionable to raising of cattle, is more than compensated to the merino sheep proprietor, by an improvement in the quantity and quality of the wool, which is much affected by climate. In tropical countries, sheep are *dressed* with hair—in more temperate, the wool is generally short and coarse, but longer and finer in cold regions. In Spain, two and a half pounds of wool, is the average product of their merinoes, and of a quality inferior to ours in the middle States, and valley of the Hudson, the same; on the elevated ground in the western part of Connecticut and Massachusetts—three, and in some flocks, four pounds.—In the southern and middle part of Vermont, from four to four and a half. In Maine the average is five; and in a few choice flocks, six pounds the sheep. The best merino wool of Europe, is from the bleak mountains of Saxony. The quantity and quality of wool is also considerably affected by the food, management and selection of flocks as nature bountiful-

ly provides a dress for all animals according to their wants. Furs are found to be good, and the staple long, in proportion to the coldness of climate.

"Northern parts of the United States and Canada, in addition to climate, have for the raising of wool, an important advantage over England, and the south of Europe, in cheapness of soil—land being required for the support of sheep. The fee simple of good sheep farms in America, can be procured with the amount of the annual rent and taxes of the same quality of ground in England."

LAYING DOWN GRASS LAND.

In the third volume of the Memoirs of the Board of Agriculture of the State of New York, we find an article by S. De Witt, Esq. of Albany, from which we extract the following.

There, in Great Britain, we are taught that in order to have good pastures or meadows, no pains or expense must be spared to enrich the soil, where that is needed, to destroy as far as possible by a suitable course of husbandry every weed or plant that previously occupied the field; to have the ground perfectly pulverised by ploughing and harrowing, and then to sow on it a plentiful quantity of grass seed suited to the soil, and of those kinds which have been proved to be the best for those purposes. The fault I mean to find with our practice, contrasted with that of the English, is this—for pasture or meadow we sow in the spring of the year, on a field of winter grain a small quantity of grass seed, from which we expect our future pastures and meadows, and trust to their branching out in two or three years so as to make tolerable pasture or meadows. In the mean while other grasses and weeds spring up so as to occupy most of the ground; and this is most notoriously the case in our new country, where the seeds of thousands of varieties of plants lie in the ground ready to spring up and overcome the growth of artificial grasses. In order to prevent this, the English practice before described is the more necessary here. The aboriginal weeds must first be destroyed by preceding crops, especially by those which require the use of the hoe, and then such a quantity of clean well selected grass seeds must be sown as will cleverly fill the ground and in their growth smother every other vegetable. For this purpose too much seed cannot be put into the ground at once. The practice of putting a small quantity of grass seed on ground laid down for pastures or meadows is one of the greatest errors in the husbandry of our country. On this subject I wish that our farmers would consult a book published in London, called the Complete Grazier. It gives recipes for the kinds and quantities of seed per acre proper to be sown on all the varieties of soils, such as clay, loam, sand, chalk peats, up-lands, mid-lands, low-lands.

As a sample I will copy a recipe for an acre for low-land; meadow fox-tail 2 pecks, meadow fescue 2 pecks, rough stalked pea 2 pecks, ray grass 1 peck, vernal grass 1 quart, white clover 2 quarts, marl grass 2 quarts, rib grass 2 quarts.

In the recipes for the various soils, the quantity of seed is generally about a bushel per acre. Let this be compared with our practice.

Here it is proper to be observed, that in laying down grounds for pasture lands, the English select the seeds of such grasses as will come to maturity in succession; but I think they carry this scheme to excess, and that there is no necessity for a mixture of such a variety of seeds to be used for these purposes. In our country the most esteemed grasses are white and red clover, timothy or herd's grass, the red top, and fowl meadow. With these some other indigenous grasses intermix, the merits of which deserve to be investigated. Our best grasses for meadows are unquestionably the timothy, the red top, and fowl meadow. The merits of this last mentioned grass are not generally known, and I suspect it to be best, for alluvial soils, to be found in our country. It appears to me to be a variety of the red top, *Agrostis vulgaris*, and preferable to it, being more delicate in its structure, and having leaves more slender, longer and greater abundance. I have been told by an acquaintance from Orange county, that it is chiefly used on the reclaimed drowned lands there, and preferred to all other grasses, and that it yields most abundant crops. I know from my own observation for a number of years, that without any artificial preparation it has gradually supplanted the coarse aquatic grasses, on the lower parts of the lower lands at Ithaca. There can be no better hay than that which is made of it. On a rich moist soil, it will grow uncommonly dense, and I should think would yield as much from an acre as any other of the best cultivated grasses.

In order to make a good meadow on a rich soil I would recommend this practice. Destroy all the weeds and natural grasses by ploughing, harrowing, and suitable crops. Prepare the ground by sufficiently pulverising it, and then sow on it so much timothy seed as that the growth from it shall immediately cover the ground, at least as thick as a field of flax. This then will give you a clear abundant crop of timothy to the exclusion of every other grass. Or if the ground be inclined to moisture, use fowl meadow seed in the same manner; or make use of a mixture of timothy and fowl meadow; at all events be not sparing of seed, and immediate abundant crops will be the reward. Timothy and fowl meadow or red top, I consider as the best of all grasses for our low-land meadows, and the more every other kind is kept out of them the better. Some of the English grasses may be advantageously used in laying down permanent pasture grounds; but white clover and timothy are the best in use among us. Red clover is to be preferred for soiling and enriching the ground, when fallowing is intended. By means of it, with the assistance of gypsum, the poorest soils can be made valuable.

I have said that too much seed cannot be put into the ground at once. Every body knows what a small quantity is generally used, and how long it is before lands laid down as pastures or meadows come to perfection, and how they are injured by grasses of spontaneous growth which ought not to be there; but for which the greater part of the surface of the ground is left by the stingy sower. In confirmation of the propriety of these remarks, I will make further quotations from the Complete Grazier.

"The following proportions were sown a few years since by the Earl of Darlington: white or Dutch clover 17 lbs., clean hay seed 14 bushels, rib grass 2½ lbs., trefoil 1½ lbs. By which means (the soil being previously ploughed very fine and made perfectly level,) the land was speedily covered with a thick and excellent herbage. The only exceptionable thing in this practice is the quantity of seed, which is certainly too large for a statute acre."

The last remark, I presume, means an unnecessary waste of seed, not that the quantity used was an injury to the production of the field.

"Mr. Dalton's mode of laying down land to grass, is to make the ground perfectly smooth and then sow upon every acre the following seeds, viz. hay 6 bushels, rib grass 12 lbs., white or Dutch clover 8 lbs., burnet 5 lbs. He manures it with a compost of earth, dung and ashes, thoroughly mixed together, and folds his sheep upon it, &c. The proportion of seed, however, is still too great, though in other respects his management be excellent.

"In the laying down of land for the purpose of forming a good meadow, greatly superior to the generality of pastures, the late Mr. Curtis recommends the following grasses, and two species of clover to be mixed in the following proportions: meadow fescue grass 1 pint, meadow fox-tail grass 1 pint, rough tailed meadow grass ½ pint, smooth stalked meadow grass ½ pint, crested dog's tail ½ pint, sweet scented spring grass ½ pint, white or Dutch clover ½ pint, common or red clover ½ pint.

"These are to be mixed together, and about 3 bushels sown on an acre."

Such appears to be the practice where agriculture has been growing towards perfection, aided by all the efforts of man, and the acquisitions of science and experience assiduously and constantly applied for its melioration, for more than a thousand years. Now let the practice in our country be considered. With the reflection of this light on it, how most wretched does it appear!

How far the grasses of Europe are proper for our country, experience must decide. We know that one of our best grasses, timothy or herds' grass, cannot be cultivated to advantage in England, and sufficient experiments have not been made, or if made, not recorded, to ascertain which of the English grasses would be an acquisition in our practice of husbandry. Nor have the proper researches yet been made to our pastures and meadows, by the introduction of the grasses on which our cattle subsist in their ranges in our forests. For this purpose I would advise, that a botanist should turn a horse or cow, not starved, but with an appetite rather sated, into the woods at a proper season of the year, and observe the grasses which the animal would select for his food. By this means some might be discovered which would make valuable additions to those used with us for our pastures or meadows.

The farmer or planter who wishes to succeed well in his business, must always be busy but never suffer himself to be hurried.

CULTIVATION OF THE SWEET POTATO.

Mr. Editor,—Sir: I comply with your request, and accordingly proceed to answer your queries upon the "cultivation of the Sweet Potato." In doing so, I only give you my own practice. Doubtless, it may contain some errors; but being, derived from experience of many years, I am inclined to recommend it, as generally correct.

I shall answer the queries in the order in which they present themselves.

Query.—What do you consider the best soil for the sweet potato?

Answer.—Both roots and slips do best on high sandy or yellow soil. Slips, however, will do well on moderately low land, well drained; so as not to be injured by too much water. When planted on land of the latter description, I have generally found, that slips do not keep as well; nor are they as sweet and mealy as when planted on high lands. New land, if the leaves upon it be well rotted, will answer well for either roots or slips; care, however, should be taken to burn the undecayed leaves, on new land intended for roots. Unless this be observed, the excessive heat of the undergoing fermentation in the summer, will burn up the potatoes.

Query.—How do you prepare your land for sweet potatoes, and at what time?

Answer.—The system of preparing land for sweet potatoes, by moveable cow-pens, I consider the very best. It saves time in carting out manure—more equally imparts the manure to the soil, and yields a greater return than any other mode of potato cultivation I have ever practised. You should commence running your cow-pen, just early enough, to allow you time to go over your land, by the time you are prepared for planting. This being done, the land will be found hard and compact. Mark it off into lines, five feet apart, so as to give twenty-one beds to the task. Run two furrows with the dagon-plough, down each line, and you will thus render the soil loose and mellow; and you may now, bed up, so as to finish by the 20th of March at which time the seed should be sown, not more than six inches apart. The most expeditious mode of sowing seed, is to drill the top of the beds with the hoe, and haul the dirt over the seed with the cover-boards.

If you have neglected to run the cow-pen over the land, manure well with either of the manures I shall mention, and list or cover over immediately as spread out, and proceed to bedding as directed above.

Query.—What is the best kind of manure for sweet potatoes?

Answer.—I have said in my last answer, that I consider running the cow-pen over the land, the very best kind of manure. When this has not been done, compost, cotton-seed, rotted marsh or sedge, and mud, are excellent, when properly applied.

The great principle in applying these manures is, to cover them well, and give them proper time to rot in the land before planting.

Cotton-seed, applied in the proportion of 1 to 2 bushels to the bed, and covered over in time to vegetate, before planting, is good for either slips or roots.

Salt mud, and even fresh mud, containing veg-

etable matter, is equally good when applied in proportion of one or two loads to the bed or task row. When mud is used, if soft, it should be spread out, so as to leave no lumps, and when dry, it should be well pulverized or chopped up fine. The salt mud is best upon high and dry soil; but it also does well upon other soils as the maturer of the roots.

Rotted marshes or sedge, is excellent when applied in proper quantities.

Oats, rye, or any other green crop ploughed or listed in, will act powerfully as manure upon potatoes. The stubble or oats, after the summer's gathering, has been tried with success.

Query.—How is the potato crop worked after planted?

Answer.—As soon as the potatoes are up, I proceed to take out all the grass and weeds, carefully picking the tops of the beds; so as not to disturb the roots of the young plants, by pulling them out. As soon as the plants begin to put forth vines, the grass and weeds, (if there be any,) should be again picked, and the dirt should now be brought up to the plants. If this work is well done, there will be little necessity of any after working. The use of the hoe at this period, frequently does more injury than service.

Query.—What are the various kinds of sweet potatoes; which the most productive; and which keeps best?

Answer.—The various kinds of potatoes I have planted are the Yams or Spanish, Leather coats, Brimstones, with red and white skins, Reds with white hearts.

The Yams or Spanish potatoes, do well in land highly manured. They produce largely, but do not come very early. They are the best potatoes to keep.

The Leather coats, very much resemble the Yams, and differ from them only in size and flavour—being larger and more mealy. In other respects the same observations apply to these potatoes as I have made upon Yams.

The Brimstone are an early potato, grow well in almost any soil; but do not keep as a provision crop.

The Reds with white hearts, I have always found the earliest potato. They produce largely on any kind of soil—keep well, and as an early crop are generally preferred by the negroes.

In conclusion, I would particularly recommend the leather coat potato, as the most delicate and best flavoured potato for table use.

AN EDISTO PLANTER.

[From the Southern Agriculturist.]

The Pride of India as a Manure, being Replies to Letters of the Editor on the subject.

MR. EDITOR,—With pleasure I comply with your request to furnish you with the result of my experiments on the 'Pride of India as a manure.' I have tried it as such for three or four years back, and can, with confidence speak as to its usefulness. My mode of collecting it is somewhat slovenly. I suffer the leaves and berries of the tree to drop off in the fall, when I gather them and throw them as a litter in my cowpen. I find that the cattle eat the leaves with great appetite. This manure when well laid upon the land and listed in, drives away all kinds of worms and in-

sects. I have tried it on a piece of my cotton land for four years, and while, at all times, my other plants were cut down and destroyed by insects, I never knew one plant growing upon the Pride of India manure to be touched. I consider the tree an invaluable one, and have accordingly planted it all around my dwelling and negro houses. I should, perhaps, have said, that in collecting this manure, I mix the leaves and berries together. The latter contain a great deal of rich oil, which may be discovered by mashing one of them upon the floor. If this hasty letter can in any way serve you, you can use it as you think best.

Respectfully, yours,

A SEA-ISLANDER.

Letter from a friend in Barnwell.

MR. EDITOR,—You ask me to say what has been the result of my experiment on the Pride of India as a manure. I am no writer, and must beg you to excuse me if I express myself very imperfectly in reference to this matter. I have never tried the Pride of India upon any thing, but corn, and some plants in my vegetable garden. I shall tell you how I have tried it with my corn and what was my success. I always trim my trees, as your correspondent of the January number advises, and then collect the leaves and berries from the limbs thus lopped off. These I put together into my manure pen to rot—which they will pretty effectually do before spring. Wherever this manure has been put, I have never had any trouble with grubs; my corn has never been cut down by them, and I believe that you can get no insect whatever to live wherever it can be smelt. As an evidence of this, when I wish to get rid of bugs in my bedsteads, I make a decoction of the roots or leaves of this tree, and by saturating the same with the mixture, I totally destroy or drive them away. I have frequently had the cabbages in my garden dreadfully eaten by worms—by throwing the leaves of this tree over them, I have invariably destroyed them. I have never seen the caterpillar on my place; but I hesitate not in saying, that wherever they are to be met with, the Pride of India leaves will destroy them. The late Mr. Reynolds of St. John's, Colleton, once told me, that one year his whole plantation, on Wadmalaw, was infested with these insects, with the exception of a small spot. This spot was near where several Pride of India trees grew, and he never found the traces of an insect near the cotton. If I lived on the island, and planted cotton, I would, ere this, manure as much as possible. I consider it in richness, superior to any cotton-seed ever used. There is some little doubt in using the seed for manure, inasmuch as it gives some inconvenience by its springing up with the cotton-seed; but this it does after the cotton has arrived at a pretty good height, and it can be easily cut down, as the sprouts from cotton-seed manure. The corn which I manured with it, produced me 28 bushels to the acre; before, the same land, had been yielding only 15 and 20 bushels, and this, too, with the ordinary cowpen manure. F.

Barnwell District, (S. C.)

[From the Library of Useful Knowledge.]

THE AMERICAN HORSE.

In the extensive territory and varied climate of the United States, several breeds of horses are found.

The *Canadian* is found principally in Canada, and the northern states. He is supposed to be of French descent, and many of the celebrated American trotters are of this breed. We will speak of some of them when we describe the paces of the horse.

The *Conestoga* horse is found in Pennsylvania and the middle states—long in the leg and light in the carcass—sometimes rising seventeen hands, used principally for the carriage; but when not too high, and with sufficient substance, useful for hunting and the saddle.

The *English* horse, with a good deal of blood, prevails in Virginia and Kentucky; and is found, to a greater or less degree, in all the states. The Americans have, at different times, imported some of the best English blood. It has been most diligently and purely preserved in the southern states. The celebrated *Shark*, the best horse of his day, and equalled by few at any time, was the sire of the best Virginia horses; and *Tallyho*, a son of *Highflyer*, peopled the Jerseys.

In the back-settlements, and in the south-western states, is a horse resembling the wild-horse of the Pampas, already described, and evidently of the same origin.

The *Flemish and Dutch Horse*—The Flemish and Dutch horses are large, and strongly and beautifully formed. We are indebted to them for some of the best blood of our draught-horses, and we still have frequent recourse to them for keeping up and improving the breed. They will be more particularly described when the cart-horse is spoken of.

PRUNING THE RASPBERRY.

Where the work was neglected in autumn it should be done immediately, or as early in the spring as circumstances will allow. The old stems which bore last year are first to be cleared away; then select on each root, for next year's bearing, three, four or five of the strongest of the last summer's shoots; the remainder, including stems, are to be cut off closely to the ground.

The shoots which are left should be shortened by cutting off their tops to about four feet in height, and should then be tied to an upright stake driven close beside the root. This support will prevent their being borne down by the weight of fruit and leaves next summer, or their being blown down by violent winds, and will also prevent their occupying too much ground by straggling beyond their limits.

At the same time they are pruned, if the state of the ground will admit it, the earth about their roots should be cleared entirely of grass and weeds, and well loosened with a hoe. If not, it must be done as early in the spring as practicable.

Every farmer who is not well supplied with this delicious fruit, and its best varieties, should take early measures to produce them. The ground it will occupy is almost nothing, the labor of cultivation is exceedingly trifling; it never fails of a crop, and this comes at a season when there is scarcely any other fruit to be obtained.

BALTIMORE PRODUCE MARKET.

These Prices are carefully corrected every MONDAY.

	PER.	FROM	TO
BEANS, white field,	bushel.	1 75	
CATTLE, on the hoof,	100lbs.	8 00	9 00
CORN, yellow,	bushel.	83	85
White,	"		78
COTTON, Virginia,	pound.		
North Carolina,	"		
Upland,	"	18	19½
FEATHERS,	pound.	48	
FLAXSEED,	bushel.		1 50
FLOUR & MEAL—Best wh. wh't fam.	barrel.	7 75	8 25
Do. do. baker's,	"	7 50	8 00
Do. do. Superfine,	"	6 87	7 12
SuperHow. st. in good de'd	"	6 81	
" " wagon price,	"	6 75	
City Mills, extra,	"		7 00
Do.	"	6 62	
Susquehanna,	"	6 75	
Rye,	"		
Kiln-dried Meal, in hhds.	hhd.		20 00
do. in bbls.	bbl.		4 50
GRASS SEEDS, red Clover,	bushel.	47 5	4 87
Timothy (herds of the north)	"	2 75	3 25
Orchard,	"	none	
Tall meadow Oat,	"		
Herds, or red top,	"		
HAY, in bulk,	ton.	18 00	
HEMP, country, dew rotted,	pound.		7
" water rotted,	"	6	8
HOGS, on the hoof,	100lb.		9 37
Slaughtered,	"		
HOPS—first sort,	pound.	18	
second,	"	16	
refuse,	"	14	
LIME,	bushel.	33	35
MUSTARD SEED, Domestic,	"		
OATS,	"		46
PEAS, red eye,	bushel.		
Black eye,	"		1 12
Lady,	"		
PLASTER PARIS, in the stone,	ton.	5 00	5 25
Ground,	barrel.	1 50	
PALMA CHRISTA BEAN,	bushel.		
RAGS,	pound.	9	4
RYE,	bushel.		96
Susquehanna,	"	92	
TOBACCO, crop, common,	100 lbs	5 00	5 50
" brown and red,	"	5 00	7 00
" fine red,	"	7 00	9 00
" wrappery, suitable	"		
for segars,	"	5 00	10 00
" yellow and red,	"	6 00	8 00
" good yellow,	"	8 00	12 00
" fine yellow,	"	12 00	16 00
Seconds, as in quality, ..	"	4 75	5 00
" ground leaf,	"	5 00	8 00
Virginia,	"	7 00	14 00
Rappahannock,	"		
Kentucky,	"	8 00	14 00
WHEAT, white,	bushel.		
Red,	"	1 35	1 40
WHISKEY, 1st pf. in bbls. }	gallon.	38½	39
" in hhds. }	"	35½	
" wagon price,	"	34	
WAGON FREIGHTS, to Pittsburgh, ..	100 lbs	2 25	
To Wheeling,	"	2 50	
WOOL, Prime & Saxon Fleeces, ...	pound.	55 to 68	30 32
Full Merino,	"	48 55	28 30
Three fourths Merino,	"	45 48	26 28
One half do.	"	40 45	24 26
Common & one fourth Meri.	"	36 40	22 24
Pulled,	"	38 40	23 24

DUTTON SEED CORN.

A small quantity of this celebrated eastern corn may be had if immediate application be made for it to the editor of the Farmer and Gardener.

ap 26

Printed by Sands & Neilson, N. E. corner of Charles and Market streets.

BALTIMORE PROVISION MARKET.

	PER.	FROM.	TO.
APPLES,.....	barrel.	—	—
BACON, hams, new, Balt. cured.....	pound.	15	17
Shoulders,.....do.....	"	12	—
Middlings,.....do.....	"	13	14
Assorted, country,.....	"	—	13½
BUTTER, printed, in lbs. & half lbs.	"	20	25
Roll,.....	"	20	22
CIDER,.....	barrel.	—	—
CALVES, three to six weeks old.....	each.	4 50	6 00
COWS, new milch,.....	"	17 00	30 00
Dry,.....	"	8 00	12 00
CORN MEAL, for family use,.....	100lbs.	1 75	1 81
CHOFF RYE,.....	"	—	1 87
EGGS,.....	dozen.	—	12
FISH, Shad, No. 1, Susquehanna,	barrel.	7 75	—
No. 2,.....	"	6 75	—
Herrings, salted, No. 1,.....	"	—	—
Mackerel, No. 2, 9 25;—No. 3	"	—	6 50
Cod, salted,.....	cwt.	3 00	3 25
LARD,.....	pound.	15	—

BANK NOTE TABLE.

Corrected for the Farmer & Gardener, by Samuel Winchester, Lottery & Exchange Broker, No. 94, corner of Baltimore and North streets.

	VIRGINIA.
U. S. Bank,.....par	Farmers Bank of Virginia 2a½
Branch at Baltimore,.....do	Bank of Virginia,.....do
Other Branches,.....do	Branch at Fredericksburg do
MARYLAND.	Petersburg,.....do
Banks in Baltimore,.....par	Norfolk,.....do
Hagerstown,.....2a	Winchester,.....do
Frederick,.....do	Lynchburg,.....do
Westminster,.....do	Danville,.....do
Farmers' Bank of Mary'd, do	Bank of the Valley,.....do
Do. payable at Easton,.....do	Branch at Romney,.....3
Salisbury,.....5 per ct. dis.	Do. Charlestown,.....do
Cumberland,.....2a	Do. Leesburg,.....do
Millington,.....do	Wheeling Banks,.....2½a
DISTRICT.	Ohio Banks, generally 3a4
Washington,.....Banks, ½.	New Jersey Banks gen. 1½a2
Georgetown,.....do	New York City,.....½a
Alexandria,.....do	New York State,.....2½a3
PENNSYLVANIA.	Massachusetts,.....2a2½
Philadelphia,.....½a	Connecticut,.....2a2½
Chambersburg,.....2a	New Hampshire,.....2a2½
Gettysburg,.....do	Maine,.....2a2½
Pittsburg,.....2a2½	Rhode Island,.....2a2½
York,.....½a	North Carolina,.....2½a3
Other Pennsylvania Bks. 1½a2	South Carolina,.....2½a3
Delaware [under \$5],.....3a4	Georgia,.....3a3½
Do [over 5],.....2a½	New Orleans,.....5
Michigan Banks,.....5a	
Canadian do,.....5a	

GAMA GRASS ROOTS.



5000 Gama Grass Roots, just received. Price \$2 per 100. This grass still retains its high character for soiling and great products. Also in store, a few pounds of GAMA GRASS SEED. Price \$6 per pound or 50c. per ounce. And will be for sale in a few days, 1300 Double Dahlia FLOWER ROOTS, embracing all the finest and most rare sorts.—Price 50 a 75 cents, \$1, 1 50 a \$2 each. A liberal discount will be made when one dozen or more are taken.

R. SINCLAIR, Jr.
Light, near Pratt st wharf.

ap 26

CONTENTS OF THIS NUMBER.

Great yield of Ruta-baga—new variety of Wheat—boundaries on Silk—editorial notice of the completion of the volume—business prospects—management of horses—cultivation of the strawberry—cultivation of Indian corn—account of the successful farming of Mr. Bement—large crops of corn, carrots and ruta-baga—singular grafting—blacksmith's cinders as a manure—Silliman on sheep husbandry—mode of laying down grass lands—cultivation of the sweet potato—Pride of India as a manure and as a destroyer of bugs and vermin—account of the American horses—treatment of the raspberry—prices current—advertisements.

IMPORTED STOCK FOR SALE.

THE EDITOR of the Farmer & Gardener, Baltimore, is authorised to sell the following valuable animals imported in November last into this country by their present owner, whose opportunities of obtaining the very best stock in the British Empire, is a guarantee of the superior excellence of the animals now offered for sale.

One improved short horn Durham BULL, calved March 24, 1834; he was got by Col. Craddock's Buckingham, dam by Scipio, g. d. by Old Stephen.

Scipio and Stephen were the property of Mr. CHARGE, one of the most eminent breeders in Durham.

Stephen was directly descended from Comet, which was sold for 1600 guineas. Old Buckingham won the Barnard Castle prize in Durham, and was got by Ephygum, dam by Young Rockingham, g. d. by Wonder. Ephygum was by Old Rockingham, and won a premium in Manchester.

His owner writes of him that "he is a majestic animal, and stands as the Durham breeders say in broad cloth; he is two years old, and is such an animal as would baffle any attempt to put a price upon him: his docility, admirable symmetry and perfection entitle him to rank as a pure short-horn bull of the first class—he cannot be surpassed."

His price is \$1,200.

A beautiful fashionable roan full blooded improved short horn Durham COW, just rising three years old, of great size and beauty of form; she was got by Architect, dam by Rob Roy, g. d. Thornton's George, g. d. Burdon.

Architect was got by Highflyer, dam by Lady Brough. Highflyer was sold to Capt. Davis, at Mr. Mason's sale, (of Chilton, England,) for 210 guineas.

The price of this Cow is \$500.

An Ayrshire COW, imported from Ayrshire, Scotland, is remarkable alike for the richness and quantity of her milk. Her cream is so butteraceous as to require but from 16 to 18 strokes of the churn to convert it into butter. Her price is \$300.

—All letters upon the subject of their purchase to the editor must be post paid. ap 19 1t

A DURHAM BULL FOR SALE.

THE Editor of the Farmer and Gardener has for sale, the thorough bred improved short-horn Durham bull Superior—he is a beautiful roan, was bred by Stephen Williams, Esquire, of Northampton, Massachusetts, and was calved July, 1831.

Superior was got by Frederick, dam Yellow Rose by Young Denton, (963)

g. d. Arabella (imported) by North Star (460)

g. g. d. Aurora, by Comet (155)

g. g. g. d. do by Henry

g. g. g. g. d. by Danby, (949)

Frederick was got by Wye Comet

Dam Tulip by Young Denton (963)

g. d. Tube Rose 2d (imported)

g. g. d. Tube Rose

g. g. g. d. Tulip Comet (157)

g. g. g. g. d. Cherry by Ladeone.

Arabella and Young Denton were sent out by Samuel Williams, the American banker in London, to his brother in Massachusetts to improve the cattle of this country, and, says our informant, never did a man hit more luckily; for the stock from young Denton have not only proved of fine size and form, but deep milkers.

Superior has two crosses per Denton, and is a very square, compact built animal, straight on the back and legs, broad on the loin and hips, chest deep and broad, short and small in the leg, rather heavy in the head and neck. So far he has proved a sure and good stock getter. \$50 have been refused for his calves by native cows. His price deliverable in Baltimore is \$300.

Also, a Hampshire Down Buck, 7 years old—price \$100—and

A South Down Buck, 1 year old this spring—price \$50.

—All letters upon the subject of the purchase of either of these animals, must be post paid. ap 19

POTATO OATS.

100 Bushels seed potato oats—a choice article—for sale by JAMES MOORE,

Light, near Pratt st.

Mh 22 at the Maryland Agricultural Repository

RUFFLE OATS,

For seed, may be had at the Maryland Agricultural Repository, Light street, Baltimore, by application to mh 22 JAMES MOORE.

A SPLENDID HERD OF STOCK FOR SALE.

THE editor of the Farmer and Gardener, has been appointed Agent for the sale of one of the largest herds of improved Cattle, Durham, Alderney, &c. to be found in the country. They are the property of a deceased person's estate, and, therefore, applications should be made early. Among them are,

2 full blooded improved short horn Durham Cows, 7 years old each, with calves

3 do do do do do do 9 years old

3 do do do do do do 20 do

3 do do do do do do 4 do in calf

3 do do do do do do 3 do do

1 do do do do do do 8 years old

15 full blooded improved short horn Durham Cows

3 full blooded improved short horn Durham Heifers, 1 year old each

2 do do do do Bulls, 3 years old each

1 do do do do do do 8 do

3 full blooded improved short-horn Durham Bulls

1 half blooded do do do do 9 years old

1 do do do do do do 7 do

2 half blooded do

2 half blooded Durham Heifers, 1 year old

1 full blooded Holland Cow, 10 years old

1 do Alderney, 17 years old

3 half blooded Devonshire Cows, one 2 years old, the other two 15 years old each.

Any person or companies wishing to purchase any portion of the above stock, will please address the editor of this paper. Pedigrees will be furnished. All letters upon the subject must be post paid. ap 19

GARDEN SEED.

THE subscriber has just received his general supply of fresh Garden Seeds from the Messrs. Landreth's of Philadelphia—those for retailing bearing their label and warranted. The Messrs. Landreth's grow the most of the seeds they vend, and theirs is the oldest and probably the most extensive establishment in this country, and their seeds have no rival as to quality. Orders from country dealers will be supplied at short notice. Catalogues furnished gratis.

JONATHAN S. EASTMAN.

March 29

ew

CHINESE MULBERRY SEED, TREES, &c.

25,000 TREES, of the Morus Multicaulis or Chinese Mulberry, can yet be supplied, and 50,000 Cuttings, ready prepared for planting, with ample directions for their management and culture.

The Trees raised from cuttings the last year, and managed according to these directions, attained the height of 5 to 6 1-2 feet, although the season was unpropitious.

Genuine SEED, in paper parcels, at \$5 each, which can be sent per mail if desired.

Orders for Trees, Cuttings or Seed, must contain a remittance by draft or otherwise, or refer to a house in New York, that will become responsible for the payment in two or three months.

Fruit and Ornamental Trees, Greenhouse Plants, Bulbous Roots, and herbaceous Plants of every kind.

Of the splendid double Dahlias, the collection comprises all the most rare and exquisite varieties, recently brought to notice in Europe; the prices are very moderate, say from \$3, 4 1-2, 6, and \$10 per dozen, and they are packed and shipped in the most careful manner.

Of Garden, Field and Flower Seeds, the assortment is the most extensive in America, and embraces a great number of choice new varieties, never before offered to the public, as will be seen by reference to the catalogues.

Priced catalogues will be sent to every applicant, and a liberal discount and credit is allowed to vendors.

WM. PRINCE & SONS,

Lin. Bot. Garden & Nurseries, near New York. ap 19 2t

GAME CHICKENS.

FOR SALE, five dollars a pair, Game Fowls, warranted to be of genuine strain. Apply to the editor. ap 5

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AUG 12 1929	

